

# **SOIL SURVEY**



## **MICCOSUKEE INDIAN ALLIGATOR ALLEY RESERVATION**

**BROWARD COUNTY, FLORIDA**



MICCOSUKEE INDIAN-ALLIGATOR ALLEY  
SOIL SURVEY REPORT

TABLE OF CONTENTS

HOW THIS SURVEY WAS MADE

HOW TO USE THIS INTERIM REPORT

DESCRIPTIONS OF THE SOILS

USE AND EXPLANATION OF SOIL INTERPRETATION TABLES

Estimated Soil Properties  
Capability and Predicted Yields  
Wildlife Suitability

SELECTED SOIL INTERPRETATION TABLES

Table H - Engineering Index Properties  
Table J - Physical and Chemical Properties of the Soils  
Table K - Soil and Water Features  
Table B1 - Land Capability Classes and Yields per Acre of Crops and  
Pasture  
Table F - Wildlife Habitat

SOIL INTERPRETATION SHEETS

Ratings for: Sanitary Facilities  
Building Site Development  
Construction Material  
Water Management  
Recreational Facilities  
Capability and Predicted Yields  
Woodland Suitability  
Wildlife Habitat Suitability  
Potential Native Plant Community (Rangeland)

SOIL MAP





## HOW THIS SURVEY WAS MADE

This survey was made to provide information about the soils in the survey area. The information includes a description of the soils and their location and a discussion of the suitability, limitations, and management of the soils for specified uses. Soil scientists observed the general pattern of drainage; the kinds of crops and native plants growing on the soils; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material from which the soil formed.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, acidity, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). The classes are used as a basis for comparison to classify soils systematically. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area are generally collected for laboratory analyses and for engineering tests. Soil scientists interpreted the data from these analyses and tests as well as the field-observed characteristics and the soil properties in terms of expected behavior of the soils under different uses. Data were assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management were assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can state with a fairly high degree of probability that a given soil will have a high water table within certain depths in most years, but they cannot assure that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, ditches and canals, all of which help in locating boundaries accurately. The soil map at the back of this report was prepared from the aerial photographs.

## HOW TO USE THIS SOIL SURVEY REPORT

This soils report contains information that can be applied in managing the land for agricultural uses; in selecting sites for roads, ponds, buildings and other structures; and in judging the suitability of tracts of land for industry and recreation.

Soil areas are outlined and identified by symbols on the soil map. All areas marked with the same symbol are the same kind of soil. List the map unit symbols that are in your area and use the Mapping Legend to find the name for each soil symbol you listed. The legend is an alphabetical listing of all soil symbols and mapping unit names. Descriptions for each of the soils are presented alphabetically in the narrative section of this report and Soil Interpretation Sheets for each soil are included following the text and tables.

The Interpretation Sheets are the key source of information in the report. Each of the interpretation sheets gives a brief description of the soil. This is followed by a section on the estimated physical and chemical properties of the soil. The soils are rated as to their suitability as resource material, as to their degree of limitations for several selected uses, such as dwellings, septic tank filter fields, etc., and for recreation. The major features affecting the soil for these uses are also shown. Other information and interpretations given are the capability, soil loss factors, and potential yields for the soil, wildlife suitability, woodland suitability and range.

Individual maps showing the relative limitations of soils for various uses can be developed by using the soil map and the interpretations. Ratings can be shown visually by coloring soil maps or transparent overlays according to the traffic-light color connotations to point up the limitations for a particular use. A map or overlay can be made in this manner for septic tank filter fields, dwellings, or for any of the uses for which the soils are rated. For example, soil areas that have a slight limitation for a given use can be colored green, those with a moderate limitation can be colored yellow, those with a severe limitation can be colored red. Once the interpretive map is complete, the patterns of the soil limitations are readily apparent. The user can quickly select areas that have potential for a particular type of development and at the same time identify the areas of severe limitations. Though this method provides a rapid appraisal of the soils, it does not eliminate the need for on-site investigation of specific sites for the design and construction of engineering works and other uses.





## Bc - BOCA FINE SAND

This is a nearly level, poorly drained, sandy soil with a loamy subsoil over limestone at a depth of 24 to 40 inches. It is in low, wet areas between depressions and slightly elevated, broad prairies. Slopes are smooth to concave and range from 0 to 2 percent.

Typically the surface layer is black fine sand about 4 inches thick. The subsurface layer is light brownish gray fine sand about 28 inches thick. The subsoil is grayish brown sandy clay loam about 6 inches thick. Limestone with numerous solution holes filled with sandy clay loam is at a depth of 38 inches.

Under natural conditions the water table is within a depth of 10 inches for about 4 months, and between 10 and 30 inches for 6 months or more. During periods of high rainfall, most areas are covered by shallow water for periods of 1 to 2 months. The existing drainage in the area lacks the capacity to remove excess water rapidly enough to prevent this.

Permeability is rapid in the sandy surface layers and moderate in the loamy subsoil. The available water capacity is low in the surface layer, very low between depths of 4 and 32 inches, and medium in the loamy subsoil. Natural fertility and organic matter content are low.

Included with this soil in mapping are small areas of Hallandale, Jupiter and Margate. Also included are similar soils with thicker, dark-colored surface layers, and soils with the limestone at depths of more than 40 inches. Included soils make up about 25 percent of any mapped area.

All areas of this soil are used for improved pasture, but because of the lack of complete water control, a variety of native grasses and sedges are part of the total available forage. With adequate water control and good management, both truck crops and improved pastures can be grown satisfactorily. With intensive management and adequate water control, citrus can also be grown on this soil.

This soil is in capability subclass IIIw.

## Ch - CHOBEE MUCK, LIMESTONE SUBSTRATUM, DEPRESSIONAL

This is a nearly level, very poorly drained soil with a thin muck surface over loamy materials resting on limestone at depths of more than 40 inches. It occurs in depressions and drainageways throughout the area and makes up about 10 percent of the total area mapped. Slopes range from 0 to 1 percent.

Typically the surface layer is black muck about 6 inches thick. Below this, the mineral surface is black sandy clay loam about 20 inches thick. The subsoil is gray sandy clay loam about 16 inches thick. Limestone underlies the soil at a depth of about 42 inches.

Under natural conditions this soil is covered by about 1 foot of water for 6 months or more in most years. The water table is within 10 inches of the surface most of the rest of each year except during droughts. Existing drainage in the area has only slightly reduced the period of standing water.

Permeability is rapid in the organic surface layer but is slow in the underlying loamy mineral layers. The available water capacity is high in the muck surface and medium high in the underlying mineral layers. Organic matter content and natural fertility are high.

Included with this soil in mapping are small areas of Gator and Copeland soils. Lauderhill soils occur in the centers of a few of the largest depressions. Also included are spots of soils similar to Chobee that have limestone at depths of less than 40 inches. Total inclusions make up about 20 percent of any mapped area.

All areas of this soil remain in native vegetation consisting of sawgrass, fireflag, pickerelweed, arrowhead, sedges and willow. Cypress trees are dominant in the southwestern part of the area. This soil occupies the lowest positions in the area and lacks drainage outlets. Therefore, its use for cultivated crops or pasture is not feasible. It is best used in its natural condition for water storage and for wetland wildlife.

This soil is in capability subclass VIIw.

## Co - COPELAND MUCKY FINE SAND, DEPRESSIONAL

This is a nearly level, very poorly drained, sandy soil with a loamy subsoil over limestone at a depth of 20 to 40 inches. It is in shallow depressions and on the edges of deeper depressions. Slopes are nearly level to concave and are less than 2 percent.

Typically the surface layer is black, mucky fine sand about 10 inches thick. The subsurface layer is grayish brown fine sand about 8 inches thick. The subsoil is grayish brown sandy clay loam about 6 inches thick. Limestone with few to many solution holes is at a depth of 24 inches. Solution holes are filled with loamy materials or marl.

Under natural conditions areas of this soil are covered by shallow water for 6 months or more in most years. Existing drainage in the area has only slightly reduced this period of excessive wetness.

Permeability is rapid in the surface and subsurface layers and is slow in the subsoil. Available water capacity is high in the surface and subsoil layers and low in the subsurface layer. Natural fertility is medium to high and organic matter content is high.

Included with this soil in mapping are small areas of Jupiter and Chobee soils, and soils similar to Copeland that have a surface layer of muck up to 10 inches thick. Total inclusions make up to 25 percent of any mapped area.

All areas of this soil remain in native vegetation that is dominantly pickerelweed and sawgrass, interspersed with various sedges. These areas are only occasionally grazed by cattle during dryer seasons. This soil is suited for a wide variety of truck crops and citrus if water control could be established, but it occurs at low elevations and drainage outlets are not available. Therefore its use for cultivated crops would generally not be feasible.

This soil is in capability subclass VIIw.

Ga - GATOR MUCK, LIMESTONE SUBSTRATUM, DEPRESSIONAL

This is a nearly level, very poorly drained organic soil over loamy mineral material resting on limestone at depths of more than 40 inches. It occurs in the centers of a few of the larger or deeper depressions in the area where conditions are favorable for the accumulation of organic materials. Slopes range from 0 to 1 percent.

Typically this soil has a surface layer of black muck about 30 inches thick over a layer of black sandy clay loam about 14 inches thick. This is underlain by limestone at a depth of about 44 inches.

Under natural conditions the soil is covered by about 1 foot of water for 6 months or more in most years. The water table is at or near the surface the rest of each year, except during extended droughts. Existing drainage has only slightly reduced the period of standing water.

Permeability is rapid in the organic surface layer and slow in the loamy mineral layer. The available water capacity is high in the organic materials and medium to high in the underlying mineral material. Organic matter content is very high and natural fertility is high.

Included with this soil in mapping are small areas of Chobee, Copeland and Lauderhill soils. Also included are soils that are similar to Gator muck but have less than 20 inches of muck, or have limestone at depths of slightly less than 40 inches. Total inclusions in any mapped area are less than 25 percent.

All areas of this soil remain in native vegetation consisting of sawgrass, fireflag and willow, with a few areas of cypress in the southwestern part of the mapped area. This soil occupies the lowest positions in the landscape and is not feasible to drain and use for cultivated crops. It is best left in its natural condition and used for water storage and wetland wildlife.

This soil is in capability subclass VIIw.

## Ha - HALLANDALE FINE SAND

This is a nearly level, poorly drained, sandy soil underlain by limestone at a depth of 4 to 20 inches. It is on broad, low flats or prairies interspersed with numerous depressions and shallow drainageways. Though all of the Miccosukee Indian land is made up of lowlands associated with the Everglades, this soil is slightly elevated above the rest and makes up about 75 percent of the mapped area. Slopes are mostly smooth to convex and range from 0 to 2 percent.

Typically the surface layer is black fine sand about 4 inches thick. The subsurface layer is light brownish gray fine sand about 3 inches thick. The subsoil is yellowish brown fine sand about 7 inches thick. Limestone with numerous solution holes is at a depth of about 14 inches. Solution holes make up to 25 percent of the area and are filled with fine sand, fine sandy loam or sandy clay loam. They are 6 to 36 inches in diameter and range to 50 inches or more in depth.

Under natural conditions the water table is within a depth of 10 inches for 2 to 4 months, and within a depth of 10 to 30 inches most of the rest of the year. During periods of high rainfall most areas are covered by shallow water for 7 days to a month. With the existing drainage in the area, the water table usually fluctuates with the water level in the canals and much of the time is below 20 inches.

Permeability is moderately rapid to rapid throughout. The available water capacity is low in the surface and subsoil layers and very low in the subsurface layer. Natural fertility and organic matter content are also low.

Included with this soil in mapping are small areas of Margate, Jupiter and Boca soils. Also included are similar soils with limestone at depths of less than 4 inches and scattered areas with limestone outcroppings. Total inclusions in any mapped area range to about 25 percent.

Most areas of this soil in the survey area are used for improved pasture. With adequate water control and good management that includes proper fertilization and controlled grazing, this soil will produce good yields of improved grasses. Because of wetness and a shallow root zone, this soil is poorly suited to cultivated crops. With bedding and complete water control it is suited to a variety of adapted vegetable crops. This soil is even more limited for citrus production, but with a well designed water control system, bedding and intense management, citrus crops can be grown.

This soil is in capability subclass IVw.



## Hs - HALLANDALE FINE SAND, SLOUGH

This is a nearly level, poorly drained, sandy soil resting on limestone at depths of less than 10 inches. It is in broad, wooded slough areas in the southwestern part of the mapped Miccosukee Indian lands. Shallow depressions are scattered through the area. Slopes are smooth to concave and range from 0 to 1 percent.

Typically the surface layer is grayish brown fine sand about 2 inches thick. Below this is light gray fine sand about 3 inches thick. Limestone with numerous solution holes is at a depth of about 5 inches. Solution holes range to 2 feet in depth and are filled with fine sand and/or sandy marl with limestone fragments.

Under natural conditions the water table is within depths of 10 inches for 2 to 4 months. During periods of high rainfall, the soil is covered by slowly moving, shallow water for periods of 1 to 2 months. The rest of each year the water table recedes below the surface of the limestone.

Permeability is rapid in this soil. The available water capacity is low. Organic matter content and natural fertility are very low.

Included in mapped areas of this soil are small areas of Jupiter, Hallandale and Chobee soils. Also included are similar soils lacking the thin surface layer because of the eroding action of the slow moving water. Areas that have up to 35 percent of limestone outcropping are common and range up to 1 acre in size. Total inclusions in any mapped area range to about 30 percent.

This soil occurs only in the southwestern part of the Indian lands and though one drainage ditch is dug through the area, little drainage is effected because the elevation of the area is only slightly above the outlet. This soil area remains in native vegetation which is dominated by scattered to dense stands of cypress. Other vegetation includes wax myrtle, needlerush, maidencane, south Florida bluestem, blue maidencane and sedges. Also, in many parts of the area vegetation is very sparse. Apparently, the washing effect of the shallow waters periodically flowing through the slough makes it difficult for vegetation to become established in these areas.

This soil is in capability subclass Vw.

## Ju - JUPITER FINE SAND

This is a nearly level, poorly drained, black sandy soil resting on limestone at a depth of 7 to 20 inches. It is in low flats, poorly defined drainageways, and in shallow depressions. Slopes are mostly smooth to concave and range from 0 to 2 percent.

Typically the surface layer is black mucky fine sand about 4 inches thick. Below this is very dark gray fine sand about 6 inches thick. Limestone with numerous solution holes is at a depth of 12 inches. Solution holes extend to depths of 2 to 3 feet and are filled with marl, or gray to brown fine sand or sandy loam.

Under natural conditions the water table is within a depth of less than 10 inches for about 4 months, and within depths of 10 to 20 inches most of the rest of the year. Lowest areas are covered by shallow water for periods of 3 months or more. The existing drainage in the area has to some extent reduced the periods of high water tables, but the lowest areas of this soil are little affected.

Permeability is rapid throughout. The available water capacity is medium to high in the surface layer and low in the subsurface layer. Content of organic matter is medium to high in the surface layer and natural fertility is medium.

Included with this soil in mapping are small areas of Haliandale, Margate and Dania soils. Also included are similar soils with thin loamy or marly layers above the limestone, and soils with limestone at depths of slightly more than 20 inches. Scattered limestone outcroppings occur in some areas. Total inclusions range to about 30 percent.

Most areas of this soil are used for improved pasture. Excessive wetness is the major limitation to this use. There are also a few small areas in mixed hardwood hammock vegetation and a few low spots that remain in native wetland vegetation. With an improved water control system and good management, this soil will produce high quality pastures of improved grasses or grass-clover mixtures. Excessive wetness and shallow depth to limestone severely limit the use of this soil for cultivated crops, but with a good water control system and good management, a variety of truck crops can be grown. The same soil properties are even more restrictive to citrus production, but with a well designed and maintained water control system and high level management, citrus crops can be produced successfully.

This soil is in capability subclass 1Vw.

## La - LAUDERHILL MUCK

This is a nearly level, very poorly drained organic soil underlain by limestone at a depth of 20 to 40 inches. It occurs in a few of the deeper depressions in the area where conditions are favorable for the accumulation of organic materials. Slopes range from 0 to 1 percent.

Typically this soil has a surface layer of black muck about 22 inches thick. Below this is a thin layer of gray loamy marl with numerous limestone fragments. This layer rests on limestone at a depth of about 25 inches and fills solution holes in the rock.

Under natural conditions the soil is covered by water most of the year. Even with the existing drainage in the area, the water table is at or near the surface most of the time.

Permeability is rapid in the surface organic materials and moderate in the thin marl layer, though this layer is normally covered by water or is absent in some places. The available water capacity is high. Organic matter content and natural fertility are also high.

Included with this soil in mapping are small areas of Gator and Chobee soils. Also included are spots of Pahokee and Dania soils, which are similar to Lauderdale soils but have different depths to limestone. Total inclusions in any mapped area are less than 20 percent.

All areas of this soil remain in native vegetation consisting primarily of willow and sawgrass. This soil occupies the lowest positions in the landscape and drainage outlets are not available. Also, if it were drained, subsidence and oxidation would soon deplete the organic materials. This soil is best used in its natural condition for water storage and wetland wildlife habitat.

This soil is in capability subclass VIIw.

Ma - MARGATE FINE SAND

This is a nearly level, poorly drained, sandy soil underlain by limestone at a depth of 20 to 40 inches. It is on the broad, slightly elevated prairies and in transitional areas between the prairies and depressional areas. Slopes are less than 2 percent.

Typically the surface layer is black fine sand about 6 inches thick. The subsurface layer is light gray fine sand about 13 inches thick. The subsoil is brown fine sand about 11 inches thick. Limestone with numerous solution holes is at a depth of 30 inches. The solution holes extend to depths of 40 to 60 inches and are filled with calcareous sandy or loamy materials, often containing limestone fragments.

Under natural conditions the water table is within a depth of 10 inches for about 4 months, or the surface is covered by shallow water for 1 to 3 months. The water table is at depths of 10 to 30 inches most of the rest of the year. Existing drainage in the area has little affected the length of time the water table is at its maximum.

Permeability is rapid in all layers of this soil. Available water capacity is low in the surface layer and very low in all other layers. Natural fertility and content of organic matter are low.

Included with this soil in mapping are small areas of Hallandale, Jupiter and Boca soils. Also included are soils similar to Margate that have slightly thinner or thicker surface layers, depths of more than 40 inches to limestone, or that have a thin layer of muck on the surface. Total inclusions make up 20 to 25 percent of any mapped area.

All areas of this soil are used for improved pasture. With adequate water control and good management that includes rotation grazing, this soil will produce high yields of improved grasses and grass-clover mixtures. With good water control, bedding and proper management, this soil can be used for a wide variety of truck crops. Citrus can also be grown successfully on this soil if a well designed water control system is established and high level management is applied.

This soil is in capability subclass IVw.

Oc - OCHOPEE LOAMY FINE SAND

This is a nearly level, poorly drained, moderately rapidly permeable, calcareous, loamy soil resting on limestone at depths of less than 10 inches. This soil occurs in broad prairies and sloughs in the southern half of the mapped Miccosukee Indian lands lying south of Alligator Alley. Slopes are smooth and range from 0 to 1 percent.

Typically the surface layer is grayish brown loamy fine sand about 4 inches thick. Below this is light gray fine sandy loam about 2 inches thick. Limestone with many small to large solution holes is at a depth of about 6 inches.

This soil is on lowlands adjacent to the Conservation Area which is managed under a program of controlled inundation. Because of this and the porous limestone base, the soil remains covered by shallow water most of each year.

Permeability is moderately rapid in this soil. The available water capacity is low. Organic matter content and natural fertility are very low.

Included in mapped areas of this soil are small areas of Hallandale, Jupiter, Chobee and Gator soils. A few of the lowest areas may have an inch or two of muck on the surface, and most areas where water remains longest have a one inch layer of periphyton on the surface. Areas that have up to 40 percent limestone outcropping and ranging to 2 or 3 acres in size are quite common. Total inclusions in any mapped area range to about 25 or 30 percent.

This soil area remains in native vegetation which is dominated by sawgrass, cordgrass, maidencane, south Florida bluestem and other grasses. Some areas have scattered to dense stands of cypress, and many other areas have needlerush and other sedges.

This soil is in capability subclass Vw.



## USE AND EXPLANATION OF SOIL INTERPRETATION TABLES

### Introduction

The interpretation tables should be used only with soil surveys of medium or detailed intensity, that have been prepared according to standard procedures of the National Cooperative Soil Survey. It is not intended that they be used with "Land-Type Surveys," low intensity surveys, or general soil maps. The interpretations are for soils in their natural state and not for disturbed areas that are altered by cut or fill operations, or by drainage.

The soil interpretations will not eliminate the need for on-site sampling, testing, and study of specific sites for design and construction of engineering works and various uses. The interpretations sheets should be used primarily to plan more detailed field investigations to determine the conditions of the soil at the proposed site for the intended use.

When the interpretations in the tables are used in connection with delineated soil areas on the soil map, the information pertains to the dominant soil which is named. Other soils, too small an area to map out, may occur within the soil map area. The interpretations ordinarily do not apply to the included soils. More detailed studies are required if small, specific sites are to be developed or used within a given soil area. For example, a soil map bearing the name Jupiter also can include small, unmappable areas of other soil such as Copeland and Gator. The interpretations apply only to the Jupiter part of the delineated soil area and not to the entire soil area.

## ESTIMATED SOIL PROPERTIES

### Introduction

The interpretation tables show the name of the series to which the interpretations are applicable. The estimated soil properties for the soil series are shown in the various tables. Although the soils bearing the same name are similar between counties and states, the physical and chemical properties of these soils may vary somewhat from one county to another and one state to another; however, the properties of the soil at any location should fall within the range of the estimates given for the soil series in the tables. For some soils, some of the physical and chemical properties are based on test data; in others, these are best estimates based on test data on similar soils.

### Explanation of Items

Depth (In.)--The depth in inches of the major soil horizons that have similar properties are given in this column.

USDA Texture--The USDA texture is based on the relative amounts of sand, silt, and clay in a soil, giving rise to textural classes such as sand,

sandy loam, loam, clay loam, and clay. (USDA Handbook No. 18, SOIL SURVEY MANUAL)

#### TABLE H

Unified Classification--In the Unified System, soils are classified according to particle size distribution, plasticity, liquid limit, and organic matter. Soils are grouped in 15 classes. There are eight classes of coarse-grained soils, identified as GW, GP, GM, GC, SW, SP, SM, and SC; six classes of fine-grained soils, identified as ML, CL, OL, MH, CH, and OH; and one class of highly organic soils, identified as Pt. Soils on the borderline between two classes are designated by symbols for both classes; for example, SP-SM.

AASHTO Classification--The AASHTO system is used to classify soils according to those properties that affect use in highway construction and maintenance. In this system, a soil is placed in one of seven basic groups ranging from A-1 through A-7 on the basis of grain-size distribution, liquid limit, and plasticity index. In group A-1 are gravelly soils of high bearing strength, or the best soils for subgrade (foundation). At the other extreme, in group A-7, are clay soils that have low strength when wet and that are the poorest soils for subgrade. The A-1, A-2, and A-7 groups can be further divided as follows: A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, and A-7-6.

Fraction Greater than 3 inches (Pct.)--Most soils in Florida do not have material this coarse. Soils that have a high content of shell may have a small percentage of shells larger than 3 inches. Soils in Florida that contain pebbles larger than 3 inches are rare.

Fraction Less than 3 inches Passing Sieve No.--The measured or estimated percentages of materials passing the numbers 4, 10, 40, and 200 sieves are given for each major horizon. The percent passing the 200 sieve approximates the amount of silt and clay, but does include some very fine sand. A range is listed because of variability for a given soil.

Liquid Limit and Plasticity Index--These indicate the effect of water on the strength and consistence of soil material. As the moisture content of a clayey soil is increased from a dry state, the material changes from a semisolid to a plastic state. If the moisture content is further increased, the material changes from a plastic to a liquid state. The plastic limit is the moisture content at which the soil material changes from the semisolid to plastic state; and the liquid limit from a plastic to a liquid state. The plasticity index is the numerical difference between the liquid limit and the plastic limit. It indicates the range for moisture content within which a soil material is plastic.

#### TABLE J

Clay (Pct.)--The measured or estimated percentages of a mineral soil separate consisting of particles less than 0.002 millimeter in diameter. A range is given because of the variability for a given soil.

Moist Bulk Density--The mass (weight) of a unit volume of moist soil. This volume includes both soil and pores. Soils that are loose and porous will have low bulk densities and those that are more compact will have high values. A range is listed because of the variability for a given soil.

Permeability (In./Hr.)--That quality of a soil that enables it to transmit water or air. Values listed are estimates of the range in rate and time it takes for downward movement of water in the major soil layers when saturated, but allowed to drain freely. The estimates are based on soil texture, soil structure, available data on permeability and infiltration tests, and drainage observations of the water movement through soils. On a given soil, percolation through the surface layer varies according to land use and management as well as with initial moisture content. The permeability is shown in inches per hour. For example, in a soil that has a permeability rate of 6.0 inches per hour in 3 hours free water would move downward a distance of (3 x 6") 18 inches.

Available Water Capacity (In./In.)--The ability of soils to hold water for use by most plants. The available water capacity is given in inches per inch of soil for major horizons. The water retention of the soil is related to the particle size, organic matter content, and to the arrangement and size of soil pores. Fine-texture soils tend to have higher water retention due to small pores than do sandy soils with large pores. Estimates of the available water capacity for soils with normally high water tables may appear meaningless until one considers the possibility of artificial drainage or the natural lowering of the water table during dry seasons, or late summer or fall. Soils of the same series vary from place to place. Therefore, values can deviate considerable from those listed. It is commonly defined as the difference between field capacity (1/3 atmosphere for loamy and clayey materials of 1/10 atmosphere for sand) and the wilting percentage (15 atmospheres) time bulk density times the thickness in inches of the soil. The formula for AWC is:

$$AWC \text{ (in/in)} = \frac{1/3 \text{ (or } 1/10) \text{ bar \%} - 15 \text{ bar \%} \times \text{bulk density, moist}}{100}$$

For example, in a soil that has an available water capacity of 0.10 in/in of soil, there would be 0.1 inch of water available for plant growth for each inch of soil, and in 24 inches of soil (0.1 x 24") 2.4 inches available.

Soil Reaction--The degree of acidity or alkalinity of a soil. It is expressed in pH - the logarithm of the reciprocal of the H-ion concentration. A soil that tests to pH 7.0 is precisely neutral in reaction because it is neither acid nor alkaline. In words, the degrees of acidity or alkalinity are expressed thus:

	pH
Extremely acid	Below 4.5
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5

	pH
Medium acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Mildly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Salinity (mmhos/cm)--The salinity is expressed in terms of the electrical conductivity of a saturation extract in millimhos per centimeter at 25 degrees centigrade. The following shows the response of plants associated with different ranges for electrical conductivity of saturation extracts of soils.

Electrical Conductivity of Saturation Extract mmho/cm at 25° C	Plant Response
0-2	Salinity effects usually negligible
2-4	Yield of very salt-sensitive crops may be restricted
4-8	Yield of salt-sensitive crops restricted
8-16	Only salt-tolerant crops yields satisfactory
16	Only a few very salt-tolerant crops yield satisfactory

If salinity is zero or no problem for growing crops, a dash is shown on the interpretation sheet. Except for areas of tidal marsh or tidal swamp along the coasts, salinity is of no importance in Florida soils.

Shrink-swell Potential--The relative change in volume to be expected of soil material with changes in moisture content; that is, the extent to which the soil shrinks as it dries out or swells when it gets wet. Extent of shrinking and swelling is influenced by the amount and kind of clay in the soil. Shrinking and swelling of soils cause much damage to building foundations, roads, and other structures. A high shrink-swell potential indicates a hazard to maintenance of structures built in, on, or with material having this rating.

Erosion Factors, (K and T)--A soil erodibility factor (K) and the soil-loss tolerance (t) are used in an equation that predicts the amount of soil loss resulting from rainfall erosion of cropland. The soil erodibility factor "K" is measure of the rate at which a soil will erode. Values are

expressed as tons of soil loss per acre per unit of R (rainfall factor) from continuous fallow (three years or more) on a 9 percent slope, 73 feet long. Thus, the K factor reflects the rate that soil erodes when other factors affecting erosion are constant. Soil properties that influences erodibility by water are: those that affect infiltration rate, movement of water through the soil, and water storage capacity; and those that resist dispersion, splashing, abrasion, and transporting forces from rainfall and runoff. Some of the soil properties that are most important are texture and organic matter of the surface layer, size and stability of structural aggregates in the surface layer, permeability of the subsoil, and depth to slowly permeable layers.

The soil-loss tolerance "T" sometimes called permissible soil loss, is the maximum rate of soil erosion that will permit a high level of crop productivity to be sustained economically and indefinitely. These rates are expressed in tons of soil loss per acre per year. Rates of 1 through 5 tons are used in the south, depending upon soil depth and prior erosion.

Wind Erodibility Groups--Soils that are subject to wind erosion are grouped into 8 groups according to their susceptibility to soil blowing. Sandy soils are most susceptible to soil blowing, especially during dry periods when wind velocities are high. Organic soils are normally wet, but they are also subject to soil blowing when drained and cultivated if the soil surface is left bare during extreme dry periods and wind velocities are high.

Organic Matter (Pct.)--The measurement of estimated percentage of the organic fraction of the soil that includes plant and animal residues at various stages of decomposition, cell and tissues of soil organisms, and substances synthesized by the soil population. It is commonly determined as the amount of organic material contained in a soil sample passed through a 2-millimeter sieve. Estimates of organic matter are given only for the surface layer.

#### TABLE K

Flooding--Flooding is defined as temporary covering of soil surface by water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, inflow from high tides, or combinations of these. Shallow water standing during or shortly following a rain is excluded from the definition of flooding. Marshes and swamps are excluded from the definition of flooding because water is more than a temporary covering.

Flooding hazard may be expressed by one of three general flood frequency classes - none, rare, or common. Duration and time of year that the flooding occurs is given for those soils with common flood hazards. Not considered here, but nevertheless important, are velocity and depth of flood waters. The classes of flooding are defined as follows:

None

No reasonable possibility of flooding.



Rare Flooding unlikely but possible under unusual weather conditions. No evidence of recent water deposited sediments on surface or within the pedon. Pedogenic horizons have developed within most soils. Flooding probability is so low that it imposes no more than slight or moderate soil limitation ratings for soil uses except those with high per-acre investments, such as residential developments.

Common Flooding is likely under usual weather conditions. Most pedons show evidence of recent water deposited sediments or scouring. The probability of recurring floods is great enough to impose severe limitations on many uses of soils, such as sanitary facilities and community development. Restrictions on farming may be slight to severe depending on duration and season of flooding.

Where a finer breakdown of common flooding is made, the following classes under common flooding are used:

Occasional Less often than once in 2 years on the average. Most pedons show evidence of past deposition or scouring. The probability of floods is not great enough to interfere seriously with farming operations although some crop damage is likely.

Frequent More often than once in 2 years on the average. The pedon shows evidence of yearly deposition or scouring. In addition, debris or other recent flood water marks are easily observable on the ground, on trees, fences, or bridges. The probability of floods is great enough to restrict the choice of crops, cause severe crop damage, or prevent the production of crops.

Duration refers to the length of time that the soils are flooded. Only duration classes for commonly frequency classes are given. These classes are as follows:

Very brief Less than 2 days. Soils have sufficient surface drainage so that flood waters run off and damage, if any, to crops results mainly from scouring or sedimentation.

Brief 2 to 7 days. Relatively permeable soils on level or depressional landscapes or soils with restricted permeability on nearly level landscapes. Most cultivated crops are severely affected by flooding; most pasture plants and trees species are slightly or moderately affected.

<u>Long</u>	7 days to 1 month. Soils on nearly level or depressional landscapes with restricted surface drainage or restricted permeability, or both. Only water tolerant plants can survive.
<u>Very Long</u>	More than 1 month. Soils on nearly level or depressional landscapes with highly restricted surface drainage and restricted permeability. Only water tolerant plants survive.

The time of year that flooding normally occurs is expressed in months, for example, December-May.

The economic and social consequences of improper land use of flood prone areas are serious. Problems begin when structures are located in flood prone areas. The initial development encourages additional construction and the installation of streets and utilities. The capacity of the floodway may be reduced by these kinds of developments increasing the flood hazard. When flooding occurs, losses are not borne only by the property owner but by the community as well. The public is usually called upon to bear the cost of flood fighting, rehabilitation, and flood protection.

Dwellings, commercial buildings, and other high cost developments that are easily damaged by floods should not be located on flood prone soils. Sanitary facilities such as septic tank filter fields, sewage lagoons, and sanitary landfills built on flood prone soils present a health hazard. Roads and street built on flood prone soils are likely to be closed during floods and may require extensive maintenance or restoration after floods.

In agricultural areas the consequences of flooding are much less expensive, but nevertheless, may present a hazard to the production of crops. the frequency, duration, and time of year the flooding occurs influences whether trees, pasture, or crops can be grown.

Trees and pastures can withstand more flooding than crops. Certain short season crops, however, can be grown successfully if the growing season is relatively flood free.

High Water Table--A high water table is defined as a zone of saturation at the highest average depth during the wettest season. It persists in the soil for more than a few days and occurs within 80 inches of the soil surface.

Most water tables occur within the soil and are measured from the surface of the soil down to the free-water level. In swamps and marshes, however, the water table is above the surface of the soil much of the time and the water table is measured from the surface of the water down to the soil surface.

Soils that have seasonal high water tables are classified according to depth to the water table, kind of water table, and time of year that the water table is highest.

The depth of the high water table from the soil surface is given in feet or half feet. The range in depth reflects the year-to-year variation in average highest depth. Depth to water table within the soil is recorded with the small number first, e.g., 2-3. Water table above the soil surface is recorded with a +, e.g., +2; if the water table varies such that the average highest depth can be above or below the surface, it is recorded as follows: +1-.05, with the first number indicating 1 foot above the soil surface, and the second number 1/2 foot below the soil surface. Where a water table is below 6 feet or exists for less than one month, 6.0 is shown under depth.

Three kinds of seasonal high water table are recognized within the soil: apparent, perched, and artesian.

Apparent Water Table - is the level at which water stands in a dug unlined borehole. It is influenced by the hydrostatic pressure of soil water and by pressure at greater depths penetrated by the borehole, water relations across impermeable layers, and other factors, in the absence of evidence that would permit greater specificity, therefore, the term apparent water table is used for the level at which water stands in an uncased borehold after adequate time of adjustment in the surrounding soil.

Perched Water Table - is one that exists in the soil above an unsaturated zone. A water table may be inferred to be perched on the basis of general knowledge of the water levels of an area, the landscape position, the permeability of soil layers, and from other evidence. To prove that a water table is perched, it is necessary to observe the water level in cased wells placed above, in, and below the less permeable layer. If the water in the well above the less permeable layer is consistently higher than the other two, the water table is perched.

Artesian Water Table - is one that exists under hydrostatic head beneath an impermeable layer has been penetrated by a cased borehole, the water rises. The final level of the water in the cased borehole may then be characterized as an artesian water table.

Areas with water tables above the surface of the soil much of the time are characterized as marsh or swamp - marsh having herbaceous vegetation and swamps having woody vegetation.

The months that the water table normally persists at the average highest depth range is shown, for example, January through April.

A seasonal high water table is an important criterion in a number of engineering and biological uses of soils. Its depth and duration influences the use of soils for septic tank absorption fields, shallow excavations, sanitary landfills, dwellings, and local roads and streets, and ease of excavation for roadfill and topsoil.

The water table also influences the growth of crops - a water table that is near the surface during the growing season is detrimental to most plants. Growing plants, however, tend to lower the water table through transpiration. A change in land use may drastically change the wetness of an area. For example, a change from trees to soybeans changes the transpiration rate and may cause a wetter soil condition. Changing land use from cropland, pasture, or forest to urban areas with streets and houses covering a much larger area not only decreases the transpiration by vegetation but also causes increased runoff. A wetter soil may result.

Bedrock--This is solid rock beneath the soil. The depth to bedrock is shown in inches for soils with bedrock within 60 inches of the soil surface. All other soils are shown as 60. Most soils in Florida are observed to depths of more than 60 inches. Refer to the depth in inches adjacent to the USDA texture to determine the depth of observation. The hardness of the bedrock is shown as SOFT or HARD. "SOFT" rock can be excavated using a single tooth ripping attachment mounted on a 200-300 horsepower tractor, "HARD" rock requires blasting or use of excavators larger than 200-300 horsepower.

Subsidence--This refers to the lowering of the level of the soil surface. When water is removed and the water table is lowered in organic soils and some mineral soils with low strength in tidal marshes, the soil will subside. Initially, or in the first few years, the subsidence is most pronounced or greatest. After initial subsidence, organic soils in Florida subside or oxidize at the rate of about 1 inch per year. Total subsidence is estimated in inches.

Corrosivity, Steel--This refers to the potential for corrosion of uncoated steel pipe buried in the soil. The soils are rates as follows: LOW (slightly corrosive), MODERATE (moderately corrosive), and HIGH (severely corrosive). Corrosion of uncoated steel pipe is a physical-biochemical process converting iron into its ions. Soil moisture is needed to form solutions with soluble salts before the process can operate. The corrosivity is estimated by electrical resistivity or resistance to flow of current, total acidity, soil drainage, and soil texture.

Corrosivity, Concrete--This refers to the potential for deterioration of concrete placed in soil materials. Deterioration is caused by a chemical reaction between the concrete (a base) and the soil solution (potential weak acid). Special cements and methods of manufacturing may be used to reduce rate of deterioration in soils of high corrosivity. Some of the soil properties that affect the rate of deterioration are soil texture and acidity, the amount of sodium or magnesium present in the soil singly or in combination, and amount of sodium chloride in the soil. The presence of sodium chloride in the soil indicates the presence of sea water. Sea water contains sulphates which is one of the principal corrosive agents.

Hydrologic Groups--Soils are grouped into four hydrologic soil groups, A through D. These groups are used mostly in watershed planning to estimate runoff from rainfall. Soil properties were considered that influence the minimum rate of infiltration obtained for a bare soil after prolonged wetting. These properties are: depth to seasonally high water table, intake rate and permeability after prolonged wetting, and depth to a layer or layers that slow or impede water movement.

Dual hydrologic groups are given for wet soils rated D in their natural condition that can be adequately drained. It is considered that drainage is feasible and practical and that drainage improves the hydrologic group by at least two classes (from D to A or B). The first letter applies to the drained condition.

Hydrologic Group A--(Low runoff potential) Soils that have high infiltration rates even when thoroughly wetted and a high rate of water transmission.

Hydrologic Group B--(Moderately low runoff potential) Soils that have moderate infiltration rates when thoroughly wetted and a moderate rate of water transmission.

Hydrologic Group C--(Moderately high runoff potential) Soils that have slow infiltration rates when thoroughly wetted and a slow rate of water transmission.

Hydrologic Group D--(High runoff potential) Soils having very slow infiltration rates when thoroughly wetted and a very slow rate of water transmission.

## CAPABILITY AND PREDICTED YIELDS - CROPS AND PASTURE

TABLE B1

Capability Classes, the broadest groups, are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations and narrower choices for practical use, defined as follows:

Class I	Soils have few limitations that restrict their use.
Class II	Soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
Class III	Soils have severe limitations that reduce the choice of plants, require special conservation practices, or both.
Class IV	Soils have very severe limitations that reduce the choice of plants, require very careful management, or both.
Class V	Soils are not likely to erode but have other limitations, impractical to remove, that limit their use largely to pasture, range, woodland, or wildlife.



Class VI	Soils have very severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture, range, woodland or wildlife.
Class VII	Soils have very severe limitations that make them unsuited to cultivation and restrict their use largely to pasture, range, woodland, or wildlife.
Class VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife, water supply or to aesthetic purposes.

Capability subclass are soil groups within one class; they are designated by adding a small letter, e, w, or s to the class numeral, for example, IIe. The letter e shows that the main limitation is risk or erosion unless close growing plant cover is maintained; w shows that water in or on the soil surface interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony.

In Class I there are no subclasses, because the soils of this class have few limitations. Class V can contain, at the most, only the subclass indicated by w and s because the soils in Class V are subject to little or no erosion, though they have other limitations that restrict their use largely to pasture, range, woodland, wildlife, or recreation.

Potential Yields Predicted yields are for principal crops grown on the soil. The predictions are based on estimates made by farmers, county and on information taken from research data. The predicted yields are average yields per acre that can be expected by good commercial farmers at the level of management which tends to produce the highest economic returns.

## WILDLIFE SUITABILITY

TABLE F

### Introduction

Soils directly influence kinds and amounts of vegetation and amounts of water available, and in this way indirectly influence the kinds of wildlife that can live in an area. Soil properties that affect the growth of wildlife habitat are: (1) thickness of soil useful to crops, (2) surface texture, (3) available water capacity to a 40-inch depth, (4) wetness, (5) surface stoniness or rockiness, (6) flood hazard, (7) slope, and (8) permeability of the soil to air and water.

On the interpretation sheet, soils are rated for producing eight elements of wildlife habitat and for three groups, or kinds, of wildlife. The ratings indicate relative suitability for various elements. A rating of good means the element of wildlife habitat and habitats generally are easily created, improved, and maintained. Few or no limitations affect

management in this category and satisfactory results are expected when the soil is used for the prescribed purpose.

A rating of fair means the element of wildlife habitat, and habitats can be improved, maintained, or created in most places. Moderate intensity of management and fairly frequent attention may be required for satisfactory results, however.

A rating of poor means the element of wildlife and limitations for the designated use are rather severe. Habitats can be improved, maintained, or created in most places, but management is difficult and requires intensive effort.

A rating of very poor means the elements of wildlife habitat are very severe and that unsatisfactory results are to be expected. It is either impossible or impractical to improve, maintain, or create habitats on soils in this category.

### Explanation of Items

Potential for habitat elements Each soil is rated according to its suitability for producing various kinds of plants and other elements that make up wildlife habitats. The ratings take into account mainly the characteristics of the soils and closely related natural factors of the environment. They do not take into account climate, present use of soils, or present distribution of wildlife and people. For this reason, selection of a site for development as a habitat for wildlife requires inspection at the site.

Grain and seed These are annual grain-producing plants such as corn, sorghum, millet, and soybeans.

Grass and legumes Making up the group are domestic grasses and legumes that are established by planting. They provide food and cover for wildlife. Grasses include bahiagrass, ryegrass, and panicgrass; legumes include annual lespedeza, shrub lespedeza, and other clovers.

Wild herbaceous This group consists of native or introduced perennial grasses, forbs, and weeds that provide food and cover for upland wildlife. Beggarweed, perennial lespedeza, wild bean, pokeweed, and cheatgrass are typical examples. On rangeland, typical plants are bluestem, grama, perennial forbs and legumes.

Hardwood trees These plants are nonconiferous trees, shrubs, and woody vines that produce wildlife food in the form of fruits, nuts, buds, catkins, or browse. Such plants commonly grow in their natural environment, but they may be planted and developed through wildlife management programs. Typical species in this category are oak, beech, cherry, dogwood, maple, viburnum, grape, honeysuckle, greenbrier, and silverberry.

Coniferous plants These plants are cone-bearing trees and shrubs that provide cover and frequently furnish food in the form of browse, seeds, or fruitlike cones. They commonly grown in their natural environment, but they may be planted and managed. Typical plants in this category are pines, cedars, and ornamental trees and shrubs.

Shrubs This column is not applicable to soils in Florida, and a dash is used to indicate this.

Wetland plants In this group are annual and perennial herbaceous plants that grow wild on moist and wet sites. They furnish food and cover mostly for wetland wildlife. Typical examples of plants are smartweed, wild millet, spikerush and other rushes, sedges, burred, tearthumb, and aneilema. Submerged and floating aquatics are not included in this category.

Shallow water This includes impoundments or excavations for controlling water, generally not more than five feet deep, to create habitats that are suitable for waterfowl. Some are designed to be drained, planted, and then flooded; others are permanent impoundments that grow submerged aquatics.

Potential as habitat for The soils are rated according to their suitability as habitat for (1) openland wildlife, (2) woodland wildlife, and (3) wetland wildlife. These ratings are related to ratings made for elements of habitat. For example, soils rated unsuited for shallow water developments are rated unsuited for wetland wildlife.

- (1) Openland wildlife are birds and mammals that normally live in meadows, pastures, and open areas where grasses, herbs, and shrubby plants grow. Quail, doves, meadowlarks, field sparrows, cottontail rabbits, and foxes are typical examples of openland wildlife.
- (2) Woodland wildlife are birds and mammals that normally live in wooded areas of hardwood trees, coniferous trees, and shrubs. Thrushes, wild turkeys, vireos, deer, squirrels, and raccoons are typical examples of woodland wildlife.
- (3) Wetland wildlife are birds and mammals that normally live in wet areas, marshes, and swamps. Ducks, geese, rails, shore birds, and herons are typical examples of wetland wildlife.

Rangeland wildlife is not rated in Florida since woodland wildlife is rated and is applicable to Florida conditions and soils.



POTENTIAL NATIVE PLANT COMMUNITY  
(RANGELAND OR FOREST UNDERSTORY VEGETATION)

Introduction

Soils in their native state have a vegetative cover or plant community that has been grown and adapted to the conditions of the particular soil on which it is found. Cultivation, burning, and over-grazing may result in a different plant community than was originally on the soil in its native state. Where data are available, a list of the common plants by name, the plant symbol, the percentage composition by class determining phase, and the potential production in favorable years, normal years, and unfavorable years are shown on the interpretation sheet.

Explanation of Items

Common plant names The common names of the major native plants that grow under climax condition on the soil are listed in this column for each class determining phase.

Phase symbol (NLSPN) A symbol derived from a combination of letters from the scientific name of the plant as compiled in the National List of Scientific Plant Names, USDA, SCS, 1971 is shown in this column.

Percentage composition (dry weight) by class determining phase The percentage of the total composition that each named plant makes up is shown in these columns for each class determining phase. Where data are not available and acceptable estimates cannot be made, the species are listed in order of their general productivity and the columns for percent composition are left blank.

Potential production The potential production of grazeable forage is shown as pounds per acre on a dry weight basis for favorable years, normal years, and unfavorable years. Favorable years are those in which rainfall and climatic conditions are favorable for the growth of plants. Normal years can be considered as years in which rainfall and climatic conditions are average for the growth of plants. Unfavorable years are those in which rainfall and climatic conditions are unfavorable for the growth of plants.



(The symbol < means less than; > means more than. Absence of an entry indicates that data were not estimated)

[illegible]

TABLE J.--PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS

(The symbol < means less than; > means more than. Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Organic matter" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated)

Map symbol and soil name	Depth In	Clay Pct	Moist bulk density G/cc	Permeability In/hr	Available water capacity In/in	Soil reaction pH	Salinity mmhos/cm	Shrink-swell potential	Erosion factors		Wind erodibility group	Organic matter Pct
									K	T		
Bc----- Boca	0-4	1-5	1.30-1.55	6.0-20	0.05-0.10	5.1-8.4	<2	Low-----	0.10	2	2	1-3
	4-32	1-5	1.50-1.60	6.0-20	0.02-0.05	5.1-8.4	<2	Low-----	0.17			
	32-38 38	14-30 ---	1.55-1.65 ---	0.6-2.0 ---	0.10-0.15 ---	5.1-8.4 ---	<2 ---	Low----- ---	0.20 ---			
Ch----- Chobee	0-6	---	0.15-0.35	6.0-20	0.30-0.50	5.1-6.5	---	Low-----	0.10	2	2	25-50
	6-26 42	20-35 ---	1.50-1.70 ---	0.06-0.2 ---	0.12-0.17 ---	6.1-8.4 ---	<2 ---	Moderate ---	0.32 ---	---	---	---
Co----- Copeland	0-10	2-5	1.20-1.55	6.0-20	0.20-0.25	5.1-6.5	---	Low-----	0.10	5	2	10-15
	10-18	2-10	1.35-1.55	6.0-20	0.05-0.10	6.1-7.3	<2	Low-----	0.17	---	---	---
	18-24 24	15-30 ---	1.55-1.70 ---	0.6-2.0 ---	0.10-0.15 ---	7.4-8.4 ---	<2 ---	Low----- ---	0.24 ---			
Ga----- Gator	0-30	0-1	0.10-0.30	6.0-20	0.30-0.40	5.6-7.3	<2	Low-----	---	---	2	55-85
	30-44 44	13-20 ---	1.60-1.70 ---	<0.2 ---	0.10-0.15 ---	6.1-8.4 ---	<2 ---	Low----- ---	0.32 ---			
Ha----- Hallandale	0-4	<3	1.35-1.45	6.0-20	0.05-0.10	5.1-6.5	<2	Low-----	0.10	2	2	1-3
	4-7	<3	1.50-1.60	6.0-20	0.03-0.08	6.1-6.5	<2	Low-----	0.10			
	7-14 14	<3 ---	1.50-1.60 ---	0.6-6.0 ---	0.03-0.08 ---	5.6-8.4 ---	<2 ---	Low----- ---	0.10 ---			
Hs----- Hallandale	0-2	1-10	1.25-1.55	6.0-20	0.05-0.07	5.1-6.5	<2	Low-----	0.10	5	2	<1
	2-5	2-10	1.35-1.55	6.0-20	0.05-0.08	5.1-6.5	<2	Low-----	0.10			
	5	---	---	---	---	---	---	---	---	---		
Ju----- Jupiter	0-4	2-8	1.35-1.50	6.0-20	0.12-0.18	6.1-8.4	<2	Low-----	0.10	2	2	3-5
	4-12 12	1-3 ---	1.50-1.65 ---	6.0-20 ---	0.05-0.08 ---	6.1-8.4 ---	<2 ---	Low----- ---	0.17 ---			
La----- Lauderhill	0-25	---	0.15-0.35	6.0-20	0.30-0.50	5.6-7.8	<2	Low-----	---	---	2	60-90
	25	---	---	---	---	---	---	---	---			
Ma----- Margate	0-6	1-4	1.25-1.45	6.0-20	0.05-0.10	4.5-6.0	<2	Low-----	0.10	3	2	1-4
	6-19	0-4	1.55-1.65	6.0-20	0.03-0.06	5.1-6.5	<2	Low-----	0.10			
	19-30 30	1-4 ---	1.55-1.65 ---	6.0-20 ---	0.03-0.06 ---	6.1-7.8 ---	<2 ---	Low----- ---	0.10 ---			



TABLE K.--SOIL AND WATER FEATURES

("Flooding" and "water table" and terms such as "rare," "brief," "apparent," and "perched" are explained in < means less than; > means more than. Absence of an entry indicates that the feature is not a concern estimated)

Map symbol and soil name	Hydro-logic group	Flooding			High water table			Bedrock		Subsidence
		Frequency	Duration	Months	Depth	Kind	Months	Depth	Hardness	
Bc----- Boca	B/D	None-----	---	---	0-1.0	Apparent	Jun-Feb	24-40	Soft	---
Ch----- Chabee	D	None-----	---	---	+2-0	Apparent	Jun-Mar	40-79	Soft	---
Co----- Copeland	D	None-----	---	---	+2-1.0	Apparent	Jul-Apr	20-50	Soft	---
Ga----- *Gator	D	None-----	---	---	+2-1.0	Apparent	Jun-Dec	>40	---	6-14 20-
Ha----- Hallandale	B/D	None-----	---	---	0-1.0	Apparent	Jun-Nov	7-20	Soft	---
Hs----- Hallandale	B/D	None-----	---	---	0-1.0	Apparent	Jun-Nov	2-20	Soft	---
Ju----- Jupiter	B/D	None-----	---	---	0-1.0	Apparent	Jun-Nov	8-20	Soft	---
La----- Lauderhill	B/D	None-----	---	---	+1-1.0	Apparent	Jun-Feb	20-40	Soft	8-12 16
Ma----- Margate	B/D	None-----	---	---	+1-1.0	Apparent	Jun-Feb	20-40	Soft	---

TABLE B1.--LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE

(Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land capability	Bahiagrass	Oranges	Grapefruit	Tomatoes
		<u>AUM*</u>	<u>Boxes</u>	<u>Boxes</u>	<u>Tons</u>
Bc----- Boca	IIIw	7.5	375	575	16
Ch----- Chobee	VIIw	---	---	---	---
Co----- Copeland	VIIw	---	---	---	---
Ga----- Gator	VIIw	---	---	---	---
Ha----- Hallandale	IVw	5.5	375	500	16
Hs----- Hallandale	Vw	---	---	---	---
Ju----- Jupiter	IVw	6.0	375	500	16
La----- Lauderhill	VIIw	---	---	---	---
Ma----- Margate	IVw	7.5	300	400	12

\* Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

41CCOSUKEE INDIAN-ALLIGATOR ALLEY SOIL SURVEY

TABLE F.--WILDLIFE HABITAT

(See text for definitions of "good," "fair," "poor," and "very poor." Absence of an entry indicates that the soil was not rated)

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	Range- land wild- life
Bc----- Boca	Poor	Fair	Fair	Poor	Poor	---	Good	Fair	Fair	Poor	Fair	Good.
Ch----- Chobee	Poor	Poor	Poor	Fair	Poor	---	Good	Good	Poor	Poor	Good	---
Co----- Copeland	Very poor.	Very poor.	Very poor.	Very poor.	Very poor.	---	Good	Good	Very poor.	Very poor.	Good	---
Ga----- Gator	Very poor.	Very poor.	Very poor.	Fair	Very poor.	---	Good	Good	Very poor.	Poor	Good	---
Ha----- Hallandale	Poor	Poor	Poor	Poor	Poor	---	Fair	Fair	Poor	Poor	Fair	---
Hs----- Hallandale	Poor	Poor	Poor	Poor	Poor	---	Fair	Good	Poor	Poor	Fair	---
Ju----- Jupiter	Poor	Poor	Poor	Poor	Poor	---	Good	Poor	Poor	Poor	Fair	---
La----- Lauderhill	Very poor.	Very poor.	Very poor.	Fair	Very poor.	---	Good	Good	Very poor.	Poor	Good	---
Ma----- Margate	Very poor.	Poor	Poor	Poor	Poor	---	Good	Good	Poor	Poor	Good	---



FL0054

## SOIL INTERPRETATIONS RECORD

BOCA SERIES

MLRA(S): 155  
REV. HFB 9-82

ARENIC OCHRAQUALFS, LOAMY, SILICEOUS, HYPERThERMIC

THE BOCA SERIES CONSISTS OF POORLY DRAINED SOILS THAT OCCUR IN LOW FLATWOODS AREAS IN THE LOWER COASTAL PLAIN. IN A REPRESENTATIVE PROFILE THE SURFACE LAYER IS DARK GRAY FINE SAND ABOUT 7 INCHES THICK. THE SUBSURFACE LAYER IS LIGHT GRAY AND VERY PALE BROWN FINE SAND. AT A DEPTH OF 25 TO 32 INCHES IS A GRAYISH BROWN SANDY CLAY LOAM SUBSOIL. SOFT LIMESTONE IS AT 34 INCHES. ABOVE THE LIMESTONE IS 2 INCHES OF MIXED ROCK, MARL, SAND AND SANDY CLAY LOAM. SLOPES ARE LESS THAN 2 PERCENT.

ESTIMATED SOIL PROPERTIES (A)											
DEPTH (IN.)	USDA TEXTURE	UNIFIED	AASHTO	FRACT >3 IN	PERCENT OF MATERIAL LESS THAN 3" PASSING SIEVE NO.				LIQUID LIMIT	PLAS- TICITY	
				(PCT)	4	10	40	200		INDEX	
0-7	S, FS	SP, SP-SM	A-3, A-2-4	0	100	100	80-99	2-12	-	NP	
7-25	S, FS	SP, SP-SM	A-3, A-2-4	0	100	100	80-99	2-12	-	NP	
25-32	SL, SCL, FSL	SC	A-2-4, A-6, A-2-6	0	100	100	80-99	17-40	16-37	5-20	
32-34	VAR			0							
34	UWB			0							

DEPTH		CLAY	MOIST	BULK	PERMEA-	AVAILABLE		SOIL	SALINITY	SHRINK-	EROSION	WIND	ORGANIC	CORROSTIVITY		
(IN.)	(PCT)	DENSITY		BILITY		WATER	CAPACITY	REACTION	(MMHOS/CM)	SWELL	FACTORS	EROD.	MATTER			
0-7	<2	(G/CM3) 1.30-1.55		(IN/HR) 6.0-20		0.05-0.10		(PH) 5.1-8.4	-	POTENTIAL LOW	K .10	T 5	GROUP 2	(PCT) 1-3	STEEL HIGH	CONCRETE MODERATE
7-25	<2	1.50-1.60		6.0-20		0.02-0.05		5.1-8.4	-	LOW	.17					
25-32	14-30	1.55-1.65		0.6-2.0		0.10-0.15		5.1-8.4	-	LOW	.20					
32-34																
34																

FLOODING		HIGH WATER TABLE		CEMENTED PAN		BEDROCK		SUBSIDIENCY		HYD	POTENTIAL		
FREQUENCY	DURATION	MONTHS	DEPTH (FT)	KIND	MONTHS	DEPTH (IN)	HARDNESS (IN)	DEPTH (IN)	HARDNESS (IN)	INTY. (IN)	TOTAL (IN)	GRP	FROST ACTION
NONE			0-1.0	APPARENT	JUN-FEB	-		124-40	SOFT	-		B/D	-

SANITARY FACILITIES (A)	CONSTRUCTION MATERIAL (A)
-------------------------	---------------------------

SEPTIC TANK ABSORPTION FIELDS	SEVERE-DEPTH TO ROCK, WETNESS	ROADFILL I	POOR-THIN LAYER, WETNESS
-------------------------------------	-------------------------------	---------------	--------------------------

SEWAGE LAGOON AREAS	SEVERE-SEEPAGE, DEPTH TO ROCK, WETNESS	SAND	IMPROBABLE-THIN LAYER
---------------------------	--	------	-----------------------

SANITARY LANDFILL (TRENCH)	SEVERE-DEPTH TO ROCK, WETNESS, TOO SANDY	GRAVEL	IMPROBABLE-TOO SANDY
----------------------------------	--	--------	----------------------

SANITARY LANDFILL (AREA)	SEVERE-AREA RECLAIM, SEEPAGE, TOO SANDY	TOPSOIL	POOR-TOO SANDY, WETNESS
--------------------------------	---	---------	-------------------------

DAILY COVER FOR LANDFILL	POOR-SEEPAGE, TOO SANDY, WETNESS	AREA	WATER MANAGEMENT (A)
		POND RESERVOIR	SEVERE-SEEPAGE

BUILDING SITE DEVELOPMENT (A)	AREA
-------------------------------	------

SHALLOW EXCAVATIONS	SEVERE-CUTBANKS CAVE, WETNESS	EMBANKMENTS DIKES AND LEVEES	SEVERE-SEEPAGE, PIPING, WETNESS
------------------------	-------------------------------	------------------------------------	---------------------------------

DWELLINGS WITHOUT BASEMENTS	SEVERE-WETNESS	EXCAVATED PONDS AQUIFER FED	MODERATE-DEPTH TO ROCK, CUTBANKS CAVE
-----------------------------------	----------------	-----------------------------------	---------------------------------------

DWELLINGS WITH BASEMENTS	SEVERE-WETNESS	DRAINAGE	DEPTH TO ROCK, CUTBANKS CAVE
--------------------------------	----------------	----------	------------------------------

SMALL COMMERCIAL BUILDINGS	SEVERE-WETNESS	IRRIGATION	WETNESS, DROUGHTY, FAST INTAKE
----------------------------------	----------------	------------	--------------------------------

LOCAL ROADS AND STREETS	SEVERE-WETNESS	TERRACES AND DIVERSIONS	DEPTH TO ROCK, WETNESS, TOO SANDY
-------------------------------	----------------	-------------------------------	-----------------------------------

LAWNS LANDSCAPING AND GOLF FAIRWAYS	SEVERE-WETNESS, DROUGHTY	GRASSED WATERWAYS	WETNESS, DROUGHTY, DEPTH TO ROCK
--	--------------------------	----------------------	----------------------------------

REGIONAL INTERPRETATIONS
--------------------------

--	--	--	--

## RECREATIONAL DEVELOPMENT (A)

CAMP AREAS	SEVERE-WEIWESS, TOO SANDY	PLAYGROUNDS	SEVERE-TOO SANDY, WEIWESS
PICNIC AREAS	SEVERE-WEIWESS, TOO SANDY	PATHS AND TRAILS	SEVERE-WEIWESS, TOO SANDY

## CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT)

CLASS- DETERMINING PHASE	CAPA- BILITY	BEANS, SNAP (BU)	TOMATOES (TONS)	CORN, SWEET (TONS)	PEPPERS (BU)	ORANGES (BOXES)	GRAPEFRUIT (BOXES)	PASTURE (AUM)
		NIKKI IRR.	NIKKI IRR.	NIKKI IRR.	NIKKI IRR.	NIKKI IRR.	NIKKI IRR.	NIKKI IRR.
ALL	3W	120	16	3.75	800	375	575	8

## WOODLAND SUITABILITY (B)

CLASS- DETERMINING PHASE	ORD	MANAGEMENT PROBLEMS					POTENTIAL PRODUCTIVITY		
	SYM	EROSION HAZARD	EQUIP. LIMIT	SEEDLING MORT'Y.	WINDTH. HAZARD	PLANT COMPET.	COMMON TREES	SITE INDI	TREES TO PLANT
ALL	2W	SLIGHT	MODERATE	MODERATE	SLIGHT	MODERATE	S FLORIDA SLASH PINE	55	S FLORIDA SLASH PINE

## WINDBREAKS

CLASS-DETERMINING PHASE	SPECIES	HT	SPECIES	HT	SPECIES	HT	SPECIES	HT
	NONE							

## WILDLIFE HABITAT SUITABILITY (C)

CLASS- DETERMINING PHASE	POTENTIAL FOR HABITAT ELEMENTS							POTENTIAL AS HABITAT FOR:				
	GRAIN & SEED	GRASS & LEGUME	WILD HERB.	HARDWD TREES	CONIFER PLANTS	SHRUBS	WETLAND PLANTS	SHALLOW WATER	OPENLD WILDLF	WOODLD WILDLF	WETLAND WILDLF	RANGELD WILDLF
ALL	POOR	FAIR	FAIR	POOR	POOR	-	GOOD	FAIR	FAIR	POOR	FAIR	GOOD

## POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR FOREST UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (NLSFN)	PERCENTAGE COMPOSITION (DRY WEIGHT) BY CLASS DETERMINING PHASE
	ALL	
CREEPING BLUESTEM	ANST	15
CHALKY BLUESTEM	ANCA4	10
HAIRY PANICUM	PARR	8
LOPSIDED INDIANGRASS	SOSE5	10
PINELAND THREEAWN	ARST5	15
PANICUM	PANIC	7
SAPPALMETTO 3/	SEKE2	15
INKBERRY 3/	ILGL	5
CABBAGE PALM 3/	SAPA	10
OTHER HALF SHRUBS 3/	HBSS	5

POTENTIAL PRODUCTION (LBS./AC. DRY WT.):  
FAVORABLE YEARS  
NORMAL YEARS  
UNFAVORABLE YEARS

## FOOTNOTES

- A RATINGS BASED ON NSN GUIDE SHEETS, 3-31-78.  
B SITE INDEX BASED ON SIMILAR SOILS IN FLORIDA.  
C WILDLIFE RATINGS BASED ON SOILS MEMORANDUM-74, JAN. 1972.  
1 FAIR SOURCE OF SHELL UNDERLIES THIN LAYER OF RIPPLE ROCK.  
2 SITE INDEX IS FOR AGE 25 YEARS.  
3 NOT USUALLY UTILIZED BY LIVESTOCK; PRODUCTION DATA NOT AVAILABLE.

CRABFE LITIES  
LIMESTONE SUBSTRATUM

THE MOORE SERIES CONSISTS OF VERY POORLY DRAINED SOILS THAT FORMED IN ALKALINE LOAMY MARINE SEDIMENTS ON THE LOWER COASTAL PLAIN. TYPICALLY THE SURFACE LAYER IS BLACK OR VERY DARK GRAY FINE SANDY LOAM ABOUT 22 INCHES THICK. THE SURFACE IS MOTTLED DARK GRAY SEABING TO GRAY SANDY CLAY LOAM TO A DEPTH OF ABOUT 40 INCHES. FRACTURED LIMESTONE IS AT A DEPTH OF ABOUT 50 INCHES. SLOPES RANGE FROM 0 TO 2 PERCENT.

[illegible]

## RECREATIONAL DEVELOPMENT

CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT) (C)

WOODLAND SUITABILITY (C)

VINDREFFANS

LIFE HABITAT SUITABILITY

1 1 1

FOOTNOTES

1 NO RECOMMENDED TREES TO PLANT DUE TO SEVERE FATIGUE FOR MANAGEMENT CONCERNS.



MR445: 155  
REV. AGH, 4-86  
TYPIC ARGILLACLS, FINE-LOAMY, SILICEOUS, HYPERTHERMIC

**COPELAND DEPRESSIONAL SOILS ARE VERY POORLY DRAINED SOILS THAT OCCUR IN DEPRESSIONS IN PENINSULAR FLORIDA. TYPICALLY SURFACE LAYER IS BLACK FINE SAND 10 INCHES THICK. THE SUBSURFACE LAYER IS DARK GRAY FINE SAND 8 INCHES THICK. THE SUBSOIL IS GRAY SANDY CLAY LOAM 6 INCHES THICK. ~~BENEATH THE SUBSOIL IS 6 INCHES OF LIGHT GRAY MARL. SOFT LIMESTONE IS BELOW A DEPTH OF 24 INCHES.~~ SLOPES RANGE FROM 0 TO 2 PERCENT.**

ESTIMATED SOIL PROPERTIES

ESTIMATED SOIL PROPERTIES											
DEPTH (IN.)	USDA TEXTURE	UNIFIED	AASHTO	IFRACT: >3 IN: (PCT)	PERCENT OF MATERIAL LESS THAN 2" PASSING SIEVE NO. 4	PERCENT OF MATERIAL LESS THAN 10" PASSING SIEVE NO. 10	PERCENT OF MATERIAL LESS THAN 40" PASSING SIEVE NO. 40	PERCENT OF MATERIAL LESS THAN 200" PASSING SIEVE NO. 200	LIQUID LIMIT (%)	PLAS (%)	
0-10	FS, LS, LFS, MK-FS	SP-SM, SM	A-3, A-2-4	0	100	100	80-100	5-15	-	NP	
10-18	FS, LS, LFS	SP-SM, SM	A-3, A-2-4	0	100	100	80-100	5-15	-	NP	
18-24	SL, FSL, SCL	SM-SC, SC	A-2-4, A-2-6	0	100	100	80-100	20-35	17-37	5-2	
25-31	MARL	EM, EM-EC	A-2-4	0	175-95	70-85	65-80	20-35	420	100-7	
24	WB										
DEPTH (IN.)	CLAY (PCT)	MOIST BULK DENSITY (G/CM3)	PERMEA- BILITY (IN/HR)	AVAILABLE WATER CAPACITY (IN/IN)	SOIL REACTION (PH)	SALINITY (PMHOS/CM)	SHRINK- SWELL POTENTIAL (IN/IN)	TEROSION FACTORS K, I, T GROUP	WIND EROD. (PCT)	ORGANIC MATTER (PCT)	CORROSIVITY STEEL CONCRETE
0-12	3-12	1.30-1.50	6.0-20	0.10-0.15	6.1-7.3	-	LOW 1.10	2	2	2-6	HIGH LOW
12-17	2-10	1.35-1.55	6.0-20	0.05-0.10	6.1-7.3	-	LOW 1.17				
17-25	15-30	1.55-1.70	0.6-2.0	0.10-0.15	7.4-8.4	-	LOW 1.24				
25-31	10-11	1.55-1.70	0.6-2.0	0.05-0.10	7.4-8.4	-	LOW 1.24				
24											
FLOODING											
HIGH WATER TABLE											
CEMENTED PAN											
RED ROCK											
SUBSIDENCE											
HYDRO-POTENTIAL											
FROST											
ACTION											
FREQUENCY	DURATION	MONTHS	(FT)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)
NONE			+2-1.0	APPARENT	JUL-APR	-	120-50	1	SOFT	-	D

SANITARY FACILITIES (A)

CONSTRUCTION MATERIAL (A)

SEPTIC TANK	SEVERE-DEPTH TO ROCK, PONDING	ROADFILL	POOR-DEPTH TO ROCK, WETNESS
ABSORPTION FIELDS			
SEWAGE LAGOON AREAS	SEVERE-SEEPAGE, DEPTH TO ROCK, PONDING	SAND	IMPROBABLE-EXCESS FINES
SANITARY LANDFILL (TRENCH)	SEVERE-DEPTH TO ROCK, SEEPAGE, PONDING	GRAVEL	IMPROBABLE-EXCESS FINES
SANITARY LANDFILL (AREA)	SEVERE-DEPTH TO ROCK, SEEPAGE, PONDING	TOP SOIL	LS, LFS: POOR-WETNESS FS: POOR-TOO SANDY, WETNESS
DAILY COVER FOR LANDFILL	POOR-DEPTH TO ROCK, PONDING	POND PERFORATION AREA	SEVERE-SEEPAGE

BUILDING SITE DEVELOPMENT (A)

SHALLOW EXCAVATIONS	SEVERE-PONDING	EMBANKMENTS, DIKES AND LEVEES	SEVERE-THIN LAYER, PONDING
DWELLINGS WITHOUT BASEMENTS	SEVERE-PONDING	EXCAVATED PONDS, AQUIFER FED	SEVERE-DEPTH TO ROCK, CUTBANKS CAVE
DWELLINGS WITH BASEMENTS	SEVERE-PONDING	DRAINAGE	PONDING, DEPTH TO ROCK
SMALL COMMERCIAL BUILDINGS	SEVERE-PONDING	IRRIGATION	PONDING, DROUGHTY, FAST INTAKE
LOCAL ROADS AND STREETS	SEVERE-PONDING	TERRACES AND DIVERSIONS	DEPTH TO ROCK, PONDING, SOIL BLOWING
LAUNDS, LANDSCAPING AND GOLF FAIRWAYS	SEVERE-PONDING	GRASSED WATERWAYS	WETNESS, DROUGHTY, DEPTH TO ROCK

REGIONAL INTERPRETATIONS


		RECREATIONAL DEVELOPMENT (A)	
	FS: SEVERE-PONDING, TOO SANDY	FS: SEVERE-TOO SANDY, PONDING	
	LS, LFS: SEVERE-PONDING	LS, LFS: SEVERE-PONDING	
CAMP AREAS	PLAYGROUNDS		
	FS: SEVERE-PONDING, TOO SANDY	FS: SEVERE-PONDING, TOO SANDY	
	LS, LFS: SEVERE-PONDING	LS, LFS: SEVERE-PONDING	
PICNIC AREAS	PATHS AND TRAILS		

[illegible][illegible][illegible][illegible]

COMMON PLANT NAME	PLANT SYMBOL	PERCENTAGE COMPOSITION (BY WEIGHT)	CLASS DETERMINING PHASE
MAINTENANCE	PAHE2	50	
PERENNIAL GOODERGRASS	AMPU2	10	
CHALKY BLUESTEM	AMCA4	5	
OTHER PERENNIAL GRASSLIKES	PPGL	5	
SAND COROGRASS	SPBA	1	
BLUEJOINT PAVICUP	PATE3	5	
OTHER ANNUAL FORBS	AAFF	5	
POTENTIAL PRODUCTION (LBS./AC. DRY WT):			
FAVORABLE YEARS		10000	
NORMAL YEARS		7500	
UNFAVORABLE YEARS		5000	

FOOTNOTES

1 NO RECOMMENDED FEES TO PLANT DUE TO SEVERE RATINGS FOR MANAGEMENT CONCERS.

4546156A  
 3444UGR. 10-86

 GATOR MUCK  
 LIMESTONE SUBSTRATUM, DEPRESS

THESE ARE VERY POORLY DRAINED MUCK SOILS THAT OCCUR IN DEPRESSIONS. THEY FORMED IN DEPOSITS OF NONWOODY, FIBROUS, HYDROPHILIC PLANT REMAINS AND LOAMY MARINE SEDIMENTS OVERLYING LIMESTONE. TYPICALLY THE SURFACE LAYER IS BLACK MUCK ABOUT 30 INCHES THICK. BELOW THIS IS A LAYER OF BLACK SANDY CLAY LOAM ABOUT 14 INCHES THICK. THIS IS UNDERLAIN BY LIMESTONE AT A DEPTH OF ABOUT 44 INCHES. SLOPES ARE LESS THAN 1 PERCENT.

ESTIMATED SOIL PROPERTIES													
DEPTH (IN.)	USDA TEXTURE		UNIFIED	AASHTO	PERCENT OF MATERIAL LESS THAN 3" PASSING SIEVE NO.					LIQUID LIMIT		PLASTICITY INDEX	
					(PT)	10	40	200					
0-30	MUCK		PT	A-1	0								
30-44	SC		SM-SC, SC	A-2-4, A-2-6	0	100	100	80-99	25-35				
44	VD												

SANITARY FACILITIES (A)				CONSTRUCTION MATERIAL (A)			
SEPTIC TANK	SEVERE-PONDING, PERCS SLOWLY, POOR FILTER			ROADFILL			POOR-WETNESS
ADSORPTION FIELDS							
SEWAGE LAGOON AREAS	SEVERE-EXCESS HUMUS, PONDING, SEEPAGE			SAND			IMPROBABLE-EXCESS HUMUS
SANITARY LANDFILL (TRENCH)	SEVERE-DEPTH TO ROCK, PONDING, <del>SEEPAGE</del> EXCESS HUMUS			GRAVEL			IMPROBABLE-EXCESS HUMUS
SANITARY LANDFILL (AREA)	SEVERE-SEEPAGE, PONDING			TOPSOIL			POOR-EXCESS HUMUS, WETNESS
DAILY COVER FOR LANDFILL	POOR-PONDING, EXCESS HUMUS			POND RESERVOIR AREA			SEVERE-SEEPAGE

BUILDING SITE DEVELOPMENT (A)				WATER MANAGEMENT (A)			
SHALLOW EXCAVATIONS	SEVERE- <del>SEEPAGE</del> CAVE, EXCESS HUMUS, PONDING			EMBANKMENTS			SEVERE-EXCESS HUMUS, PONDING
DWELLINGS WITHOUT FOUNDATIONS	SEVERE-SUBSIDES, PONDING, LOW STRENGTH			EXCAVATED PONDS			SEVERE-SLOW REFILL, <del>SEEPAGE</del>
DWELLINGS WITH FOUNDATIONS	SEVERE-SUBSIDES, PONDING			AGRIFFER FED			
SMALL COMMERCIAL BUILDINGS	SEVERE-SUBSIDES, PONDING, LOW STRENGTH			DRAINAGE			PERCS SLOWLY, SUBSIDES, <del>SEEPAGE</del> PONDING
LOCAL ROADS AND STREETS	SEVERE-SUBSIDES, PONDING			TERRACES AND DIVERSIONS			PONDING, SOIL BLOWING, <del>SEEPAGE</del>
LAWN, LANDSCAPING AND GOLF FAIRWAYS	SEVERE-PONDING, EXCESS HUMUS			GRASSED WATERWAYS			WETNESS, PERCS SLOWLY

REGIONAL INTERPRETATIONS							

RECREATIONAL DEVELOPMENT (A)

		RECREATIONAL DEVELOPMENT (RD)	
	SEVERE-PONDING, EXCESS HUMUS, PERCS SLOWLY		SEVERE-EXCESS HUMUS, PONDING, PERCS SLOWLY
CAMP AREAS		PLAYGROUNDS	
	SEVERE-PONDING, EXCESS HUMUS, PERCS SLOWLY		SEVERE-PONDING, EXCESS HUMUS
PICNIC AREAS		PATHS AND TRAILS	

[illegible][illegible][illegible][illegible]

POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR FOREST UNDERSTORY VEGETATION)		PERCENTAGE COMPOSITION (DRY WEIGHT) BY CLASS DETERMINING PHASE			
COMMON PLANT NAME	PLANT SYMBOL (NLSPN)				
JAMAICA SAVGRASS	CLJA				
COASTAL PLAIN WILLOW	SACA5				
ARROWHEAD	SAGIT				
PICKERELWEED	POCO14				
POTENTIAL PRODUCTION (LBS./AC. DRY WT.)					
FAVORABLE YEARS					
NORMAL YEARS					
UNFAVORABLE YEARS					

## FOOTNOTES

A PATINGS BASED ON USH 403, JULY 1983.

8 RATINGS BASED ON DEM. PART 537 AND SIMILAR SOILS.

C WILDLIFE RATINGS BASED ON SOILS MEMORANDUM 74, JANUARY 1972.

1 VO RECOMMENDED TREES TO PLANT DUE TO SEVEPE PATINGS FOR MANAGEMENT CONCERNS.

MLRA(S): 155  
REV. TEC, 7-83

## BALLANTRAE SERIES

REV. DEC 7-83  
LITHIC PSAMMAQUENTS, SILICEOUS, EYPERTHERMIC  
THE BALLANDALE SERIES CONSISTS OF POORLY DRAINED SHALLOW SANDY SOILS. A REPRESENTATIVE PROFILE HAS A THIN BLACK SURFACE  
LAYER, A GRAYISH SUBSURFACE LAYER AND THIN DISCONTINUOUS BROWNISH OR YELLOWISH LAYERS IMMEDIATELY ABOVE HARD LIMESTONE  
BOULDERS AT ABOUT 16 INCHES. THE SOIL FORMED IN THIN BEDS OF SANDY MARINE SEDIMENTS. SLOPES ARE LESS THAN 2 PERCENT.

[illegible]

DEPTH/CLAY MOIST BULK PERMEA-		AVAILABLE		SOIL SALINITY		SHRINK-		EROSION/WIND		ORGANIC		CORROSTIVITY	
(IN.)	(PCT)	DENSITY	BILITY	WATER CAPACITY	REACTION	(MMHOS/CM)	SWELL	FACTORS	EROD.	MATTER			
0-4	<3	(G/CM3) 1.35-1.45	(IN/HR) 6.0-20	(IN/IN) 0.05-0.11	(PH) 5.1-6.5	-	POTENTIAL LOW	K 1	T 2	GROUP 2	(PCT) 2-5	STEEL HIGH	CONCRETE LOW
4-10	<3	1.50-1.60	6.0-20	0.03-0.08	6.1-6.5	-	LOW	.10					
10-14	<3	1.50-1.60	0.6-6.0	0.03-0.08	5.6-8.4	-	LOW	.10					
14-16 16	<5	1.50-1.60	6.0-20	0.05-0.10	6.6-8.4	-	LOW	.10					

FLOODING			HIGH WATER TABLE			CEMENTED PAV		BEDROCK		SUBSIDENCE HYDROPOYENT L			
FREQUENCY	DURATION	(MONTHS)	DEPTH (FT)	KIND	MONTHS	DEPTH (IN)	HARDNESS	DEPTH (IN)	HARDNESS	INIT. (IN)	TOTAL (IN)	GRP	FROST ACTION
NONE-RARE			0-1.0	APPARENT	JUN-NOV	-		7-20	SOFT	-		18/D	-

~~CONSTRUCTION MATERIAL (8)~~

SEPTIC TANK ABSORPTION FIELDS	SEVERE-DEPTH TO ROCK, WEINSS	ROADFILL	POOR-AREA RECLAIM, TEIN LAYER, WEINSS
-------------------------------------	------------------------------	----------	---------------------------------------

SEWAGE LAGOON AREAS	NONE: SEVERE-SEEPAGE,DEPTH TO ROCK, WETNESS RARE: SEVERE-SEEPAGE,DEPTH TO ROCK,FLOODING	SAND	IMPROVABLE-THIN LAYER
---------------------	--	------	-----------------------

SANITARY LANDFILL (TRENCH)	SEVERE-DEPTH TO ROCK, SEEPAGE, WEINISS	GRAVEL	IMPROBABLE-TOO SANDY
----------------------------------	--	--------	----------------------

SANITARY LANDFILL (AREA)	SEVERE-DEPTH TO ROCK,SLEEPAGE,WEENESS	TOPSOIL	POOR-TOO SANDY,WEENESS,AREA RECLAIM
--------------------------------	---------------------------------------	---------	-------------------------------------

DAILY	POOR-AREA RECLAIM, SEEPAGE, 100 GALLONS	WATER MANAGEMENT (B)	
COVER FOR LANDFILL		POND RESERVOIR	SEVERE-DEPTH TO ROCK

## WATER MANAGEMENT (B)

SHALLOW EXCAVATIONS	SEVERE-WEIKNSS,DEPTH TO ROCK	EMBANKMENTS DIKES AND LEVEES	SEVERE-SEEPAGE,PIPING,WEIKNSS
------------------------	------------------------------	------------------------------------	-------------------------------

DWELLINGS WITHOUT BASEMENTS	NONE: SEVERE-WEINSS RARE: SEVERE-FLOODING, WEINSS	EXCAVATED PONDS AQUIFER FED	SEVERE-DEPTH TO ROCK, CUTBACKS CAVE
-----------------------------------	--	-----------------------------------	-------------------------------------

DWELLINGS WITH BASEMENTS	SURE: SEVERE-WETNESS, DEPTH TO ROCK RARE: SEVERE-FLOODING, WETNESS, DEPTH TO ROCK	DRAINAGE	DEPTH TO ROCK, CUTBACKS LAKE
--------------------------------	--	----------	------------------------------

SMALL COMMERCIAL BUILDINGS	NONE: SEVERE-WETNESS RARE: SEVERE-FLOODING, WETNESS	IRRIGATION	WETNESS, DROUGHT, FAST INFLAKE
----------------------------------	--	------------	--------------------------------

LOCAL ROADS AND STREETS	SEVERE WEISS	TERRACES AND DIVERSIONS	DEPTH TO ROCK, WEISS, TOO SANDY
-------------------------------	--------------	-------------------------------	---------------------------------

LANDS LANDSCAPING AND GOLF FAIRWAYS	SEVERE-WEIENESS, DROUGHTY, THIN LAYER	GRASED WATERWAYS	WEIENESS, DROUGHTY, DENSE TO ROCK
--	---------------------------------------	---------------------	-----------------------------------

## REGIONAL INTERPRETATIONS

## RECREATIONAL DEVELOPMENT (B)

CAMP AREAS	NONE: SEVERE-WEINSS, TOO SANDY RARE: SEVERE-FLOODING, WEINSS, TOO SANDY	PLAYGROUNDS	SEVERE-TOO SANDY, WEINSS, DEPTH TO ROCK
PICNIC AREAS	SEVERE-WEINSS, TOO SANDY, DEPTH TO ROCK	PATHS AND TRAILS	SEVERE-WEINSS, TOO SANDY

## CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT)

CLASS- DETERMINING PHASE	CAPA- BILITY	POTATOES (TONS)	CABBAGE (CRATES)	ORANGES (BOXES)	GRAPEFRUIT (BOXES)	PASTURE (AUM)												
ALL	4W	16	300	25	200	5.5												

## WOODLAND SUITABILITY (C)

CLASS- DETERMINING PHASE	OKD	MANAGEMENT PROBLEMS						POTENTIAL PRODUCTIVITY				TREES TO PLANT					
	SYM	EROSION HAZARD	EQUIP. LIMIT	SEEDLING MORT'Y.	WINDT. HAZARD	PLANT COMPET.		COMMON TREES				SITE INDX	TREES TO PLANT				
ALL	4W	SLIGHT	MODERATE	MODERATE	MODERATE	MODERATE		S FLORIDA SLASH PINE				35	S FLORIDA SLASH PINE				

## WINDBREAKS

CLASS-DETERMINING PHASE	SPECIES	HT	SPECIES	HT	SPECIES	HT	SPECIES	HT
	NONE							

## WILDLIFE HABITAT SUITABILITY (D)

CLASS- DETERMINING PHASE	POTENTIAL FOR HABITAT ELEMENTS							POTENTIAL AS HABITAT FOR:					
	GRAIN & SEED	GRASS & LEGUME	WILD HERB.	HARDW. TREES	CONIFER PLANTS	SHRUBS		WETLAND PLANTS	SHALLOV WATER	OPENED WILDLF	WOODSD WILDLF	WETLAND WILDLF	RANGELN WILDLF
ALL	POOR	POOR	POOR	POOR	POOR	-		FAIR	GOOD	POOR	POOR	FAIR	POOR

## POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR FOREST UNDERSTORY VEGETATION) (E)

COMMON PLANT NAME	PLANT SYMBOL (NLSFN)	PERCENTAGE COMPOSITION (DRY WEIGHT) BY CLASS DETERMINING PHASE											
PINELAND THREEAWN	AXS15	15											
ROUNDSEED PANICUM	PASP2	10											
PANICUM	PANIC	15											
PERENNIAL COOBERGRASS	AMMU2	10											
CREEPING BLUESTEM	ANST	15											
SAMPALHETO	SERE2	25											
TOOTHACHEGRASS	CTAR	10											
POTENTIAL PRODUCTION (LBS./AC. DRY WT):													
FAVORABLE YEARS													
NORMAL YEARS													
UNFAVORABLE YEARS													

## FOOTNOTES

- A BEDROCK IS HARD BUT CAN BE EXCAVATED WITH POWER EQUIPMENT BECAUSE IT IS FRACTURED OR IS BOULDERS.  
 B RATINGS BASED ON NSH, PART II, SECTION 403, 3-78.  
 C SITE INDEX IS FOR AGE 25 YEARS.  
 D WILDLIFE RATINGS BASED ON SOILS MEMORANDUM-74, JAN. 1972.  
 E PRODUCTION DATA NOT AVAILABLE.

LATITUDE: 155, 156, 156B

REV. VER. ACP. 10-85

LITHIC PSAMMAGENTS, SILICEOUS, HYDROTHERMIC

HALLANDALE SERI

SLOU

THE HALLANDALE, CONCAVE SOILS CONSIST OF SHALLOW, POORLY DRAINER, NEARLY LEVEL SOILS THAT OCCUR IN SLOUGHS. TYPICALLY, THE SURFACE LAYER IS DARK GRAYISH BROWN FINE SAND ABOUT 2 INCHES THICK. THE NEXT 9 INCHES IS VERY PALE BROWN FINE SAND BELOW 11 INCHES IS LIMESTONE BEDROCK. SLOPE RANGE FROM 0 TO 1 PERCENT.

ESTIMATED SOIL PROPERTIES											
DEPTH (IN.)	USDA TEXTURE	UNIFIED	AASHTO	PERCENT OF MATERIAL LESS THAN 2" PASSING SIEVE NO.				LIQUID LIMIT	PLASTICITY INDEX		
0-2	FS, S	SP-SM	A-1, A-2-4	0	100	100	100	5-12	-	NP	
2-11	FS, S	SP-SM	A-1, A-2-4	0	100	100	100	5-12	-	NP	
11	WB										
DEPTH (IN.)	CLAY	MOIST	BULK	PERCENT	AVAILABLE	SOIL	SALINITY	SHRINK	EROSION	WIND	ORGANIC
(PCT)	DENSITY	UTILITY	WATER CAPACITY	REACTION	IMPHOS/CM	POTENTIAL	K	1	GROUP	(PCT)	STEEL
	(G/CM <sup>3</sup> )	(IN/IN)	(IN/IN)	(CM)							CONCRETE
0-2	1-2	1.20-1.40	6.0-20	0.02-0.05	6.1-7.3	-	LOW	1.10	2	2	1-2
2-11	2-3	1.45-1.55	4.0-20	0.05-0.08	6.6-7.8	-	LOW	1.10			High
11											LOW
FLOODING											
HIGH WATER TABLE											
CEMENTED FAN											
PETROCK											
SUBSISTENCE											
HYDROPOIENT											
FROST											
FREQUENCY	DURATION	MONTHS	(FT)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	ACTION
NONE			0-1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

SANITARY FACILITIES (A)				CONSTRUCTION MATERIAL (A)			
SEPTIC TANK	ABSORPTION	FIELDS	SEVERE-DEPTH TO ROCK, WETNESS, POOR FILTER	ROADFILL	POOR-DEPTH TO ROCK, WETNESS		
SEWAGE LAGOON AREAS			SEVERE-DEPTH TO ROCK, WETNESS	SAND	IMPERFORABLE-THIN LAYER		
SANITARY LANDFILL (TRENCH)			SEVERE-DEPTH TO ROCK, SEEPAGE, WETNESS	GRAVEL	IMPERFORABLE-TOO SANDY, THIN LAYER		
SANITARY LANDFILL (AREA)			SEVERE-DEPTH TO ROCK, SEEPAGE, WETNESS	TOPSOIL	POOR-DEPTH TO ROCK, TOO SANDY, WETNESS		
DAILY COVER FOR LANDFILL			POOR-DEPTH TO ROCK, SEEPAGE, TOO SANDY				
				WATER MANAGEMENT (A)			
				FOND RESERVOIR AREA	SEVERE-SEEPAGE, DEPTH TO ROCK		

BUILDING SITE DEVELOPMENT (A)							
SHALLOW EXCAVATIONS			SEVERE-DEPTH TO ROCK, WETNESS	EMBANKMENT	SEVERE-SEEPAGE, WETNESS		
DWELLINGS WITHOUT BASEMENTS			SEVERE-WETNESS	DIKES AND LEVEES			
DWELLINGS WITH BASEMENTS			SEVERE-WETNESS, DEPTH TO ROCK	EXCAVATED PONDS	SEVERE-DEPTH TO ROCK, CUTBANKS CAVE		
SMALL COMMERCIAL BUILDINGS			SEVERE-WETNESS	ADJUTER FFD	DEPTH TO ROCK, CUTBANKS CAVE		
LOCAL ROADS AND STREETS			SEVERE-WETNESS	DRAINAGE	WETNESS, DROUGHTY, DEPTH TO ROCK		
LANES, LANDSCAPING AND GOLF FAIRWAYS			SEVERE-WETNESS, DROUGHTY, DEPTH TO ROCK	IRRIGATION	DEPTH TO ROCK, WETNESS, TOO SANDY		
				TERRACES AND DIVERSIONS	WETNESS, DEPTH TO ROCK, DROUGHTY		
				GRASSED WATERWAYS			

REGIONAL INTERPRETATIONS							

RECREATIONAL DEVELOPMENT (A)	
SEVERE-WETNESS, TOO SANDY, DEPTH TO ROCK	SEVERE-TOO SANDY, WETNESS, DEPTH TO ROCK
CAMP AREAS	PLAYGROUNDS
PICNIC AREAS	NATIVE AND TRAILS

CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT)													
CLASS- DETERMINING PHASE	CAP- CILITY												
ALL													

WOODLAND SUITABILITY (C)									
CLASS- DETERMINING PHASE	SYMF	EFOS	NIEGUP	ISEEDL	WIDOTH	FLART	POTENTIAL PRODUCTIVITY COMMON TREES	SITF	PROOF
ALL									

CLASS-DETERMINING PHASE	SPECIES	HT	SPECIES	HT	SPECIES	HT	SPECIES	HT
	NONE							

WILDLIFE HABITAT SUITABILITY (C)									
CLASS- DETERMINING PHASE	GRAIN	RIGPASS	WILD	THARDWD	CONIFER	SHRUBS	POTENTIAL FOR HABITAT ELEMENTS	WETLAND	POTENTIAL AS HABITAT FOR
ALL									

POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR FOREST UNDERSTORY VEGETATION)									
COMMON PLANT NAME	PLANT SYMBOL	ALL	PERCENTAGE COMPOSITION (DRY WEIGHT) BY CLASS DETERMINING PHASE						
BLUE MAIDENCANE	AMH2	50							
CHALKY FLUSTEM	ANCA4	10							
OTHER PERENNIAL GRASSLIKE	PDGL	5							
BLUE JOINT BANTON	PAIE3	5							
CANE COTTEPASS	CPRA	5							
WETLAND THERFANN	APST5	5							
OTHER ANNUAL FORPS	APFF	5							
POTENTIAL PRODUCTION (LBS./AC. DRY WT):									
FAVORABLE YEARS		9000							
NORMAL YEARS		4000							
UNFAVORABLE YEARS		4000							

## FOOTNOTES

\* DURING PERIODS OF HIGH RAINFALL, THE SOIL IS COVERED BY A SLOWLY MOVING LAYER OF LATEF FOR ABOUT 7 TO 30 DAYS.

\* RATINGS BASED ON NWH, 60% JULY 1963.

\* RATINGS BASED ON NWH, SEC. 537 AND ON SIMILAR SOILS.

\* WILDLIFE RATINGS BASED ON SOILS MEMORANDUM-74, JAN 1972.

\* TREE PLANTING FEASIBLE ONLY ON AREAS WITH ADEQUATE WATER CONTROL. SOUTH FLORIDA SLASH PINE USED ONLY IN SOUTHERN MOS



FL0053

## SOIL INTERPRETATIONS RECORD

JUPITER SERIES

MLRA(S): 155, 156A, 156B  
REV. HFM, 12-80

TYPIC HAPLAQUOLLS, SANDY, SILICEOUS, HYPERATHERMIC

THE JUPITER SERIES CONSISTS OF POORLY DRAINED SHALLOW SANDY SOILS OVER FRACTURED LIMESTONE. IN A REPRESENTATIVE PROFILE THE SURFACE LAYER IS BLACK FINE SAND ABOUT 11 INCHES THICK. NEXT IS 3 INCHES OF LIGHT GRAY FINE SAND THAT OVERLIES HARD LIMESTONE AT A DEPTH OF 14 INCHES. SOLUTION HOLES ARE IN THE LIMESTONE. THESE SOILS OCCUR ON BROAD LOW FLATS AND LOW HAMMOCKS. SLOPES ARE LESS THAN 1 PERCENT.

ESTIMATED SOIL PROPERTIES											
DEPTH (IN.)	USDA TEXTURE	UNIFIED	AASHTO	PERCENT OF MATERIAL LESS THAN 3" PASSING SIEVE NO.					LIQUID LIMIT	PLAS- TICITY	
				(PCT)	4	10	40	200		INDEX	
0-11	S, FS	SP-SM	A-3, A-2-4	0	100	100	85-95	5-12	<40	NP	
11-14	S, FS	SP, SP-SM	A-3	0	100	100	85-95	2-5	<40	NP	
14	WB										

FLOODING			HIGH WATER TABLE			CEMENTED PAV		BEDROCK		SUBSIDENCE		HYDIPOTENTIAL		
FREQUENCY		DURATION	MONTHS	DEPTH (FT)	KIND	MONTHS	DEPTH (IN)	HARDNESS	DEPTH (IN)	HARDNESS	INIT. (IN)	TOTAL (IN)	GRP	FROST ACTION
NONE				0-1.0 APPARENT JUN-NOV			-		8-20	SOFT	-		17/01	-

SANITARY FACILITIES (A)										CONSTRUCTION MATERIAL (A)									
-------------------------	--	--	--	--	--	--	--	--	--	---------------------------	--	--	--	--	--	--	--	--	--

SEPTIC TANK ABSORPTION FIELDS	SEVERE-DEPTH TO ROCK, WETNESS	ROADFILL	POOR-AREA RECLAIM, WETNESS
SEWAGE LAGOON AREAS	SEVERE-SEEPAGE, DEPTH TO ROCK, WETNESS	SAND	IMPROBABLE-THIN LAYER
SANITARY LANDFILL (TRENCH)	SEVERE-DEPTH TO ROCK, SEEPAGE, WETNESS	GRAVEL	IMPROBABLE-TOO SANDY
SANITARY LANDFILL (AREA)	SEVERE-DEPTH TO ROCK, SEEPAGE, WETNESS	TOPSOIL	POOR-AREA RECLAIM, TOO SANDY, WETNESS
DAILY COVER FOR LANDFILL	POOR-AREA RECLAIM, SEEPAGE, TOO SANDY	WATER MANAGEMENT (A)	
		POND RESERVOIR AREA	SEVERE-DEPTH TO ROCK
BUILDING SITE DEVELOPMENT (A)			
SHALLOW EXCAVATIONS	SEVERE-DEPTH TO ROCK, WETNESS	EMBANKMENTS DIKES AND LEVEES	SEVERE-SEEPAGE, PIPING, WETNESS
DWELLINGS WITHOUT BASEMENTS	SEVERE-WETNESS	EXCAVATED PONDS AQUIFER FED	SEVERE-DEPTH TO ROCK, CUTBANKS CAVE
DWELLINGS WITH BASEMENTS	SEVERE-WETNESS, DEPTH TO ROCK	DRAINAGE	DEPTH TO ROCK, CUTBANKS CAVE
SMALL COMMERCIAL BUILDINGS	SEVERE-WETNESS	IRRIGATION	WETNESS, DROUGHTY, FAST INTAKE
LOCAL ROADS AND STREETS	SEVERE-WETNESS	TERRACES AND DIVERSIONS	DEPTH TO ROCK, WETNESS, TOO SANDY
LAWNS, LANDSCAPING AND GOLF FAIRWAYS	SEVERE-WETNESS, THIN LAYER	GRASSED WATERWAYS	WETNESS, DROUGHTY, DEPTH TO ROCK

## REGIONAL INTERPRETATIONS

--	--

## RECREATIONAL DEVELOPMENT (A)

CAMP AREAS	SEVERE-WETNESS, TOO SANDY, DEPTH TO ROCK	PLAYGROUNDS	SEVERE-TOO SANDY, WETNESS, DEPTH TO ROCK
PICNIC AREAS	SEVERE-WETNESS, TOO SANDY, DEPTH TO ROCK	PATHS AND TRAILS	SEVERE-WETNESS, TOO SANDY

## CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT)

CLASS- DETERMINING PHASE	CAPA- BILITY	TOMATOES (TONS)	CABBAGE (CRATES)	ORANGES (BOXES)	GRAPEFRUIT (BOXES)	PASTURE (AUM)							
		1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.	1000 LBS. 1000 LBS.
ALL	4W	16	300	375	500	5.5							

## WOODLAND SUITABILITY (C)

CLASS- DETERMINING PHASE	SYM	EROSION HAZARD	EQUIP. LIMIT	SEEDLING MORT'Y.	WINDTH. HAZARD	PLANT COMPET.	POTENTIAL PRODUCTIVITY	COMMON TREES	SITE INDX	TREES TO PLANT
ALL	4WD	SLIGHT	SEVERE	MODERATE	MODERATE	MODERATE	S FLORIDA SLASH PINE	35		S FLORIDA SLASH PINE

## WONDEREAKS

CLASS-DETERMINING PHASE	SPECIES	HT	SPECIES	HT	SPECIES	HT	SPECIES	HT
	NONE							

## WILDLIFE HABITAT SUITABILITY (E)

CLASS- DETERMINING PHASE	POTENTIAL FOR HABITAT ELEMENTS	POTENTIAL AS HABITAT FOR:
	CRAIN & SEED GRASS & LEGUME WILD HERB. HARDWD TREES CONIFER PLANTS SHRUBS	WETLAND PLANTS SHALLOW WATER OPENED WILDLF WOODLD WILDLF WETLAND WILDLF RANGELD WILDLF
ALL	POOR POOR POOR POOR POOR	GOOD POOR POOR POOR FAIR

## POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR FOREST UNDERSTORY VEGETATION)

COMMON PLANT NAME	PLANT SYMBOL (WISPN)	PERCENTAGE COMPOSITION (DRY WEIGHT) BY CLASS DETERMINING PHASE
PINELAND THREEAWN CREEPING BLUESTEM CHALKY BLUESTEM SAND CORDGRASS BALD CYPRESS CABBAGE PALM OTHER PERENNIAL GRASSES OTHER PERENNIAL FORBS	AR5Y5 ANST ANCA4 SPRA IADI2 SAPA PPGG PPFF	ALL

POTENTIAL PRODUCTION (LBS./AC. DRY WT):  
FAVORABLE YEARS  
NORMAL YEARS  
UNFAVORABLE YEARS

## FOOTNOTES

- A RATINGS BASED ON NSH, PART 11, SECTION 403.  
B WILDLIFE RATINGS BASED ON SOILS MEMORANDUM-74, JAN. 1972.  
C SITE INDEX IS FOR AGE 25 YEARS.

FLO069

## SOIL INTERPRETATIONS RECORD

LAUDERHILL SERIES

MKA(S): 156A, 156B

REV. AGH, 3-83

LITHIC MEDISAPRISTS, EUIC, HYPERTHERMIC

THE LAUDERHILL SERIES CONSISTS OF VERY POORLY DRAINED ORGANIC SOILS THAT OCCUR IN THE EVERGLADES OF SOUTH FLORIDA. IN A REPRESENTATIVE PROFILE LAYERS OF WELL DECOMPOSED BLACK AND DARK REDDISH BROWN MUCK EXTEND TO A DEPTH OF ABOUT 31 INCHES. LIMESTONE, WITH NUMEROUS SOLUTION HOLES, OCCURS AT THIS DEPTH. THESE SOILS FORMED IN HYDROPHYTIC PLANT REMAINS. SLOPES RANGE FROM 0 TO 2 PERCENT.

ESTIMATED SOIL PROPERTIES													
DEPTH (IN.)	USDA TEXTURE	UNIFIED	AASHTO	PERCENT OF MATERIAL LESS > 3 IN. THAN 3" PASSING SIEVE NO.	LIQUID LIMIT	PLAS- TICITY							
				(PCT)	4	10	40	200	INDEX				
0-31	MUCK UWB	PT		0									
DEPTH: CLAY MOIST BULK PERMEA- AVAILABLE SOIL SALINITY SHRINK- EROSION WIND ORGANIC CORROSION ((IN.)) ((PCT)) DENSITY BILITY WATER CAPACITY REACTION ((PHOS/CM)) SWELL FACTORS EROD. MATTER													
0-31	-	(G/CM <sup>3</sup> ) 0.15-0.35	(IN/HR) 6.0-20	(IN/IN) 0.20-0.30	(PH) 5.6-7.8	-	POTENTIAL LOW	K -	T 2	GROUP 2	(PCI) >60	STEEL HIGH	CONCRETE MODERATE
31													
FLOODING HIGH WATER TABLE CEMENTED PAN BEDROCK SUBSIDENCE HYDRO- POTENTIAL FREQUENCY DURATION MONTHS DEPTH (FT) KIND MONTHS DEPTH (IN) HARDNESS DEPTH (IN) HARDNESS INIT. TOTAL GRP PROST NONE +1-1.0 APPARENT JUN-FEB - 20-40 SOFT 4-8 116-36 E/D -													
SANITARY FACILITIES (A)							CONSTRUCTION MATERIAL (A)						
SEPTIC TANK ABSORPTION FIELDS	SEVERE-DEPTH TO ROCK, PONDING, POOR FILTER				ROADFILL	POOR-AREA RECLAIM, WEINSS							
SEWAGE LAGOON AREAS	SEVERE-SEEPAGE, DEPTH TO ROCK, EXCESS HUMUS				SAND	IMPROBABLE-EXCESS FINES							
SANITARY LANDFILL (TRENCH)	SEVERE-DEPTH TO ROCK, SEEPAGE, PONDING				GRAVEL	IMPROBABLE-EXCESS FINES							
SANITARY LANDFILL (AREA)	SEVERE-DEPTH TO ROCK, SEEPAGE, PONDING				TOPSOIL	POOR-EXCESS HUMUS, WEINSS							
DAILY COVER FOR LANDFILL	POOR-AREA RECLAIM, PONDING, EXCESS HUMUS				WATER MANAGEMENT (A)								
					POND RESERVOIR	SEVERE-SEEPAGE							
					AREA								
BUILDING SITE DEVELOPMENT (A)													
SHALLOW EXCAVATIONS	SEVERE-EXCESS HUMUS, PONDING				EMBANKMENTS DIKES AND LEVEES	SEVERE-EXCESS HUMUS, PONDING							
DWELLINGS WITHOUT BASEMENTS	SEVERE-PONDING, LOW STRENGTH				EXCAVATED PONDS AQUIFER FED	SEVERE-DEPTH TO ROCK							
DWELLINGS WITH BASEMENTS	SEVERE-PONDING				DRAINAGE	PONDING, DEPTH TO ROCK, SUBSIDES							
SMALL COMMERCIAL BUILDINGS	SEVERE-PONDING, LOW STRENGTH				IRRIGATION	PONDING, SOIL BLOWING, DEPTH TO ROCK							
LOCAL ROADS AND STREETS	SEVERE-PONDING				TERRACES AND DIVERSIONS	DEPTH TO ROCK, PONDING, SOIL BLOWING							
LAWNS LANDSCAPING AND GOLF FAIRWAYS	SEVERE-PONDING, EXCESS HUMUS				GRASSED WATERWAYS	WEINSS, DEPTH TO ROCK							
REGIONAL INTERPRETATIONS													

## RECREATIONAL DEVELOPMENT (A)

CAMP AREAS	SEVERE-PONDING, EXCESS HUMUS	PLAYGROUNDS	SEVERE-EXCESS HUMUS, PONDING
PICNIC AREAS	SEVERE-PONDING, EXCESS HUMUS	PATHS AND TRAILS	SEVERE-PONDING, EXCESS HUMUS

## CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT)

CLASS- DETERMINING PHASE	CAPA- BILITY	SUGARCANE (TONS)	CORN, SWEET (TONS)	CELERY (CRATES)	LETTUCE (CRATES)	CABBAGE (CRATES)	PASTURE (AUM)								
		INIRN	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.	IRK.
ALL	3W	40	4.5	800	300	340	15								

## WOODLAND SUITABILITY (B)

CLASS- DETERMINING PHASE	OR	MANAGEMENT PROBLEMS					POTENTIAL PRODUCTIVITY			
	SYM	EROSION HAZARD	EQUIP. LIMIT	SEEDLING MORT'Y.	WINDTH. HAZARD	PLANT COMPET.	COMMON TREES		SITE INDX	TREES TO PLANT
							NONE			

## WINDBREAKS

CLASS-DETERMINING PHASE	SPECIES	INT	SPECIES	INT	SPECIES	INT	SPECIES	INT
	NONE							

## WILDLIFE HABITAT SUITABILITY (C)

CLASS- DETERMINING PHASE	POTENTIAL FOR HABITAT ELEMENTS						POTENTIAL AS HABITAT FOR:					
	GRAIN & SEED	GRASS & LEGUME	WILD HERB.	HARDWD TREES	CONIFER PLANTS	SARUBS	WETLAND PLANTS	SHALLOW WATER	OPENLD WILDLF	WOODLD WILDLF	WETLAND WILDLF	RANGELD WILDLF
ALL	V. POOR	POOR	POOR	V. POOR	V. POOR	-	GOOD	GOOD	POOR	V. POOR	GOOD	-

## POTENTIAL NATIVE PLANT COMMUNITY (RANGELAND OR FOREST UNDERSTORY VEGETATION) (D)

COMMON PLANT NAME	PLANT SYMBOL (NLSFN)	PERCENTAGE COMPOSITION (DRY WEIGHT) BY CLASS DETERMINING PHASE									
JAMAICA SAWGRASS MAIDENCANE CUTTHROAT GRASS SOUTHERN WILDRICE	CLJA PAHE2 PAAB ZIMI										
POTENTIAL PRODUCTION (LES./AC. DRY WT):											
FAVORABLE YEARS											
NORMAL YEARS											
UNFAVORABLE YEARS											

## FOOTNOTES

- A RATINGS BASED ON NSH, PART II, SECTION 403. "SOFT" BEDROCK REFERS TO ROCK THAT CAN BE EXCAVATED WITH NORMAL  
 B NOT USED FOR PINE TREE PRODUCTION.  
 C WILDLIFE RATINGS BASED ON SOILS MEMORANDUM-74, JAN. 1972.  
 D PRODUCTION DATA NOT AVAILABLE.



# AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL

FLORIDA  
1976

Table 1

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
DEVILS GARDEN TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EVERGLADES	71.9	6.3	63.4	- 3.2	71.0	1.1	71.0	-	71.0	-	80.2	-	80.9	- 1.4	82.5	-	82.7	-	79.3	- 2.6	71.0	-	71.0	-	71.0	-
FLAMINGO RANGER STA	73.0	-	65.6	-	72.0	3.5	74.5	1.2	78.9	1.2	80.0	-	79.6	-	81.4	-	81.7	-	79.0	-	70.6	-	65.9	-	75.2	1.3
FORT MYERS WSO AP	70.9	9.5	64.0	9	71.4	71.4	71.5	77.3	77.3	77.3	78.4	- 1.1	81.4	- 1.1	81.2	-	81.7	-	79.1	-	70.6	-	65.9	-	75.2	1.3
JIMMOBILE 3 NNM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LA BELLE	-	-	63.9	- 1.4	72.0	3.5	71.6	- 1.1	77.4	-	79.2	-	79.9	-	80.5	-	81.7	-	79.6	-	68.7	-	63.9	-	73.9	1.4
MOORE HAVEN LOCK 1	71.7	9.0	62.8	- 1.1	70.9	2.9	71.6	- 1.1	77.4	-	79.2	-	79.9	-	80.5	-	81.7	-	79.6	-	68.7	-	63.9	-	73.9	1.4
NAPLES 2 NF	72.0	6.8	65.6	- 1.3	72.2	2.8	74.0	5	77.3	-	80.0	-	80.7	- 1.7	82.5	-	83.5	-	78.0	-	72.0	-	66.7	-	75.2	1.7
PUNTA GORDA 4 ENE	71.2	7.2	63.8	-	72.1	72.1	72.6	-	77.8	-	79.9	-	80.6	-	81.9	-	82.4	-	79.9	-	68.8	-	66.2	-	73.2	1.2
TARIAMI TRL 40 MI BEND	73.0	5.8	65.9	- 2.4	71.0	4	71.6	- 2.1	77.6	-	79.7	-	81.4	- 1.0	82.1	-	83.3	-	78.5	-	72.8	-	66.2	-	73.2	1.2
DIVISION	71.8	7.6	64.0	- 1.4	71.6	2.7	72.5	-	77.6	-	79.5	-	80.4	- 1.4	81.6	-	82.2	-	74.6	-	70.2	-	65.7	-	74.3	1.4
LOWER EAST COAST 06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FORT LAUDERDALE	73.4	0.6	66.4	- 1.3	72.8	2.1	73.9	-	77.9	-	80.3	-	81.0	- 1.2	82.7	-	83.8	-	76.3	-	71.6	-	67.2	-	74.5	1.8
FT LAUDERDALE EXP STA	72.1	7.9	65.0	-	72.1	4.8	73.6	-	78.1	-	80.6	-	81.6	-	82.7	-	83.8	-	76.3	-	71.6	-	67.2	-	74.5	1.8
MIAMI	73.7	6.1	65.4	-	72.1	2.7	72.6	-	77.7	-	80.6	-	81.6	-	82.7	-	83.8	-	76.3	-	71.6	-	67.2	-	74.5	1.8
MOOREHEAD EXP STA	71.4	6.1	65.4	-	72.1	2.7	72.6	-	77.7	-	80.6	-	81.6	-	82.7	-	83.8	-	76.3	-	71.6	-	67.2	-	74.5	1.8
LOXAHATCHEE	70.2	6.2	64.1	-	70.7	2.7	70.8	-	76.2	-	78.7	-	79.0	-	80.7	-	81.9	-	77.6	-	72.6	-	68.3	-	72.6	1.2
MIAMI BEACH	74.2	5.7	68.0	- 1.0	74.9	3.1	74.8	-	78.2	-	80.2	-	81.9	-	82.5	-	83.5	-	76.4	-	73.3	-	68.6	-	76.3	1.2
MIAMI WSO AP	74.3	7.1	68.9	- 1.1	75.6	4.3	76.2	- 1.2	80.0	-	82.1	-	82.9	-	84.0	-	84.1	-	78.1	-	72.9	-	69.0	-	77.3	1.0
MIAMI 12 SSM	73.2	7.3	68.0	-	75.6	4.3	76.2	-	80.0	-	82.1	-	82.9	-	84.0	-	84.1	-	78.1	-	72.9	-	69.0	-	77.3	1.0
POMPANO BEACH	74.1	7.1	68.0	-	75.6	4.4	76.2	-	80.0	-	82.1	-	82.9	-	84.0	-	84.1	-	78.1	-	72.9	-	69.0	-	77.3	1.0
SOUTH MIAMI 5 N	-	-	66.7	-	73.2	4.4	76.2	-	80.0	-	82.1	-	82.9	-	84.0	-	84.1	-	78.1	-	72.9	-	69.0	-	77.3	1.0
STUART 1 N	71.1	5.7	64.8	- 1.4	72.0	2.3	72.6	- 1.5	76.0	-	78.1	-	79.0	-	80.3	-	81.8	-	75.3	-	69.5	-	64.7	-	78.0	1.8
WEST PALM BEACH WSO AP	73.2	7.7	66.7	-	73.6	3.8	74.3	-	78.6	-	80.0	-	81.8	-	82.7	-	83.8	-	77.0	-	72.0	-	66.8	-	75.8	1.3
DIVISION	72.8	6.5	66.3	-	73.3	3.1	73.8	-	77.9	-	79.8	-	80.7	-	81.7	-	81.9	-	76.0	-	71.2	-	67.0	-	75.2	1.5
KEYS 07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KEY WEST WSO AP	76.8	6.1	71.0	-	75.8	1.2	77.6	-	80.4	-	82.9	-	83.6	-	84.2	-	84.4	-	79.1	-	75.3	-	72.1	-	78.6	1.4
KEY WEST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MARATHON SHORES	75.9	6.4	70.2	-	76.1	2.8	76.6	-	79.2	-	82.2	-	83.0	-	83.3	-	83.0	-	78.4	-	74.5	-	70.7	-	77.8	1.8
TAVERNIER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIVISION	76.4	6.6	70.6	-	76.0	2.5	77.1	-	79.8	-	82.6	-	83.1	-	83.5	-	83.8	-	78.4	-	74.6	-	71.4	-	78.1	1.7

See Reference Notes Following Station Index



# TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

FLORIDA  
1974

TABLE 2

STATION	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		ANNUAL		
	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	PRECIP	DEPARTURE	
SARASOTA	0.03		2.08		1.51		0.53		0.81		12.40		6.41		11.51		4.73		4.44		2.7		3.57		44.83		
TAMPA WSD AP	1.13	2.16	0.88	1.97	2.39	1.54	0.38	1.72	1.12	1.30	19.75	7.26	3.43	5.00	6.07	3.33	6.00	2.35	1.39	2.31	1.12	1.67	3.80	0.61	33.90	15.48	
TARPON SPGS SEMAGE PL	0.07	2.62	1.44	1.38	5.31	0.95	0.85	1.83	1.02	0.64	18.23	12.71	6.11	4.99	9.38	0.0	7.33	0.04	0.07	2.71	1.30	1.61	2.23	0.31	52.58	1.09	
VENICE	0.74		0.40		0.20		0.26		1.28		11.93		13.14		13.69		7.62		0.20		1.41		2.81		51.72		
VERO BEACH 4 W	2.64		1.91		1.91		2.97		6.35		9.18		7.14		8.68		4.38		9.13		2.94		1.06		50.68		
WAUCHULA 2 N	0.03	2.17	1.12	1.67	0.10	3.05	1.58	1.25	2.74	1.25	14.97	6.31	10.05	1.01	7.92	4.4	3.58	4.30	0.10	2.95	0.15	1.47	2.32	0.62	46.85	9.81	
WINTER HAVEN	0.61	1.72	0.88	1.98	2.60	1.23	1.32	1.32	5.05	1.10	13.07	6.07	10.48	1.97	6.22	0.39	7.51	0.72	0.43	2.93	0.65	1.31	1.08	0.42	50.41	1.59	
DIVISION	0.97	1.70	1.85	1.62	1.35	2.25	1.13	1.55	9.32	1.11	13.83	6.52	9.09	1.09	7.30	0.39	5.89	1.61	0.67	3.33	0.58	1.29	2.45	0.46	47.59	5.59	
EVERGLADES AND SW COAST																											
BELLE GLADE EXP STA	0.81	1.18	0.19	1.78	0.42	2.80	1.34	1.62	2.68	2.06	13.15	4.07	11.52	2.94	7.20	1.01	9.47	0.65	1.18	4.47	1.65	0.95	1.76	0.04	51.30	7.39	
CANAL POINT USDA	2.12		0.58		0.22		1.37		0.01		10.43		8.87		5.89		7.14		2.06		1.60		0.95		49.24		
CLEMISTON U S ENG	1.12	1.44	0.24	1.82	0.37	2.50	0.89	1.91	1.80	2.70	18.27	8.69	11.63	4.70	9.00	2.48	4.72	2.31	1.91	2.64	1.38	1.19	1.09	0.49	49.51	1.13	
DEVILS GARDEN TOWER																											
EVERGLADES	0.35	1.32	0.00	1.79	0.00	1.96	2.27	1.08	3.15	1.51	12.09	2.60	9.43	0.83	6.30	0.49	5.74	3.86	0.11	4.65	0.38	1.06	4.15	2.92	43.95	10.45	
FLAMINGO RANGER STA	7.48		0.20		0.30		1.38		3.18		8.00		4.78		5.28		3.94		2.88		0.05		1.78		39.14		
FORT MYERS WSD AP	0.24	1.28	0.81	1.22	0.03	3.03	1.13	1.92	2.40	1.99	20.10	11.21	14.47	5.57	7.70	0.02	4.21	4.40	0.19	4.18	1.44	0.15	0.89	0.41	52.83	1.12	
IMMOBILE 3 NW	0.24		1.68		1.23		1.31		6.98		16.78		8.41		8.47		7.41		0.44		2.28		0.43		55.68		
LA BELLE	1.10	1.64	0.81	1.42	0.04	3.21	1.42	1.12	7.86	3.34	16.34	6.69	9.43	0.91	6.77	0.93	5.62	1.87	0.84	3.76	1.64	0.39	1.72	0.21	52.59	2.03	
MOORE HAVEN LOCK 1	1.10	1.62	1.36	1.70	0.08	2.80	0.97	1.70	3.00	1.43	14.91	6.85	18.58	11.40	7.99	1.42	5.91	1.58	1.33	3.19	1.64	0.50	1.71	0.18	57.62	7.40	
NAPLES 2 NE	1.12	1.75	0.41	1.67	0.00	2.40	0.03	1.97	5.19	1.39	12.82	4.67	6.73	1.63	3.50	2.61	7.58	1.88	0.04	4.19	2.72	1.35	1.14	0.13	42.38	10.62	
PUNTA GORDA 4 ENE	1.10	1.81	0.18	2.12	0.42	2.36	0.83	1.74	2.49	1.15	23.99	16.87	7.89	0.30	9.92	2.72	4.52	3.39	0.54	3.50	0.68	0.68	1.85	0.20	53.25	1.56	
TAMPAI TRL 40 MI BEND	1.22	1.32	0.09	2.22	1.11	1.57	1.11	1.57	1.11	4.82	11.36	1.54	19.02	4.84	10.10	2.69	4.69	6.64	1.59	4.34	4.04	2.54	1.90	0.83	49.53	7.96	
DIVISION	0.53	1.23	0.55	1.44	0.28	2.40	1.07	1.37	9.82	0.65	14.52	5.74	10.23	2.23	7.52	0.22	6.10	2.14	1.11	3.69	1.62	0.25	1.59	0.13	48.93	4.39	
LOWER EAST COAST																											
FORT LAUDERDALE	4.75	2.08	0.21	2.09	1.58	0.81	0.26	3.18	4.59	0.92	9.56	1.39	7.60	1.74	4.89	2.02	8.97	0.38	4.62	4.31	3.90	0.97	2.89	0.36	53.59	6.69	
FT LAUDERDALE EXP STA	2.79		0.34		2.19		0.65		3.74		7.34		8.24		9.37		5.38		5.45		3.30		3.21		50.03		
HALEAH	2.89	0.60	0.00	1.95	0.91	1.14	0.70	3.04	4.34	1.74	14.02	4.62	6.89	0.46	3.77	3.79	4.64	4.74	4.19	4.62	2.96	0.14	2.65	0.91	67.96	15.18	
HOMESTEAD EXP STA	0.79	1.05	0.10	1.78	0.03	2.22	3.20	0.09	3.84	2.22	8.03	4.30	9.37	1.58	9.72	2.14	4.86	5.21	1.00	6.78	3.18	1.06	0.87	0.49	63.43	19.56	
LOXAHATCHEE	6.03	3.61	0.52	1.92	1.95	1.94	1.19	2.11	3.03	1.93	8.21	1.40	10.74	2.72	5.53	2.69	7.32	2.55	3.47	4.47	4.39	2.09	2.08	0.02	54.46	10.03	
MIAMI BEACH	2.79	0.85	0.02	1.82	0.38	1.44	1.59	1.04	5.21	0.80	4.08	2.67	3.22	1.69	2.40	1.82	2.90	4.35	1.67	5.10	3.94	1.61	0.92	1.20	28.68	17.86	
MIAMI WSD AP	2.94	0.39	0.10	1.85	2.27	0.20	2.11	1.45	2.63	3.45	8.12	0.88	8.09	0.82	9.29	2.57	6.38	2.36	3.68	4.50	4.62	1.90	1.17	0.47	49.00	10.80	
MIAMI 12 55W	4.42	2.24	0.00	2.02	0.60	1.90	1.18	2.15	3.82	2.76	9.15	3.64	9.91	0.35	3.13	2.75	1.83	7.25	2.78	6.14	3.40	0.81	1.27	0.38	33.43	25.88	
POMPANO BEACH	11.27	6.78	0.20	2.14	1.30	1.40	0.80	2.64	3.02	2.33	6.44	1.67	7.60	0.89	4.03	2.84	8.04	0.19	3.85	6.61	5.45	2.72	1.50	1.08	54.35	8.38	
ROYAL PALM RANGER STA	0.31		0.06		0.13		5.33		2.29		10.76		10.76		6.34		5.40		6.00		2.12		0.30		48.53		
SOUTH MIAMI 5 W	3.48		0.88		2.14		5.28		8.63		8.28		8.28		9.24		9.11		2.92		2.88		1.50		55.34		
STUART 1 N	1.87	0.50	0.80	1.72	1.40	2.08	1.36	1.44	3.47	1.01	8.30	1.16	12.44	5.89	5.00	1.13	3.59	4.87	4.40	3.08	3.22	1.05	2.04	0.22	47.95	8.04	
WEST PALM BEACH WSD AP	8.70	5.70	0.42	2.10	2.44	0.88	1.18	2.13	2.93	2.24	4.87	3.27	11.00	4.48	5.85	1.04	5.62	4.23	9.30	0.55	3.99	1.51	2.54	0.35	58.46	2.60	
DIVISION	4.29	2.00	0.22	1.98	1.32	1.23	1.37	1.94	3.82	1.05	7.57	0.98	8.04	1.47	6.03	0.60	5.80	3.22	4.00	4.41	3.77	1.21	1.83	0.14	48.06	11.47	
KEYS																											
KEY WEST WSD AP	0.57	1.10	0.41	1.44	0.10	1.28	0.21	1.96	3.45	0.94	1.99	1.98	2.98	1.79	4.12	0.34	3.05	4.29	0.95	4.62	1.22	1.45	0.33	1.19	19.99	20.00	
KEY WEST MARATHON SHORES	1.43		0.44										4.49		5.67		1.78		4.44		0.73						
TAVERNIER	2.70	0.20	0.25	1.62	0.40	1.61	0.46	1.83	5.28	0.89	3.63	3.00	2.79	1.98	3.79	1.09	2.71	4.88	0.71	7.64	0.97	1.99	2.27	0.22	24.93	23.96	
DIVISION	1.39	0.45	0.37	1.54	0.38	1.44	0.33	1.77	4.36	1.21	3.30	2.00	3.72	0.90	4.53	0.08	2.53	4.49	2.08	4.77	0.77	1.58	1.30	0.60	24.51	18.13	

See Reference Notes Following Station Index



FLORIDA  
1974

- 5 -

# TEMPERATURE EXTREMES AND FREEZE DATA

FLORIDA  
1974

Table 3

Station	Highest	Date	Lowest	Date	Last spring minimum of										First fall minimum of										Number of days between dates				
					16° or below		20° or below		24° or below		28° or below		32° or below		32° or below		28° or below		24° or below		20° or below		16° or below		16° or below	20° or below	24° or below	28° or below	32° or below
					Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.					
					Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.					
TARPON SPGS SEMAGR PL VENICE	93	9-22+	30	2-27	NONE		NONE		NONE		NONE		2-27	30	NONE		NONE		NONE		NONE		NONE		NONE		NONE		
VERO BEACH 4 W	98	5-31	31	2-27	NONE		NONE		NONE		NONE		2-27	31	NONE		NONE		NONE		NONE		NONE		NONE		NONE		
WAUCHULA 2 N	93	9-29+	32	2-27	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
WINTER HAVEN	97	5-31	29	12-10+	NONE		NONE		NONE		NONE		2-28	32	12- 5	29	NONE		NONE		NONE		NONE		NONE		NONE		
	96	8-29+	30	12- 5	NONE		NONE		NONE		NONE		NONE		12- 5	30	NONE		NONE		NONE		NONE		NONE		NONE		
* * *																													
EVERGLADES AND SW COAST	05																												
BELLE GLADE EXP STA	94	10- 1+	35	2-12+	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
CANAL POINT USDA	96	8-21	35	2-12+	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
CLEWISTON U S ENG	97	9-26	36	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
DEVILS GARDEN TOWER																													
EVERGLADES	96	8-15+	35	2-28	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
FLAMINGO RANGER STA																													
FORT MYERS WSO AP	95	5-15	39	2-27+	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
IMMOKALEE 3 NNW	94	9-13+	31	2-27	NONE		NONE		NONE		NONE		2-27	31	NONE		NONE		NONE		NONE		NONE		NONE		NONE		
LA BELLE																													
MOORE HAVEN LOCK 1	95	4- 2	36	12- 5+	NONE		NONE		NONE		NONE		2-12	31	12- 5	32	NONE		NONE		NONE		NONE		NONE		NONE		
NAPLES 2 NE	98	9-15	33	2-27	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
PUNTA GORDA 4 ENE	95	9-13			NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
TAMIAHI TRL 4D MI BEND	97	5-29	38	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
* * *																													
LOWER EAST COAST	06																												
FORT LAUDERDALE	94	7-12+	41	2-12+	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
FT LAUDERDALE EXP STA																													
HIALEAH	94	8-20+	43	2-27+	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
HOMESTEAD EXP STA	95	9-29	37	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
LDXAHATCHEE	94	9-28+	31	2-11	NONE		NONE		NONE		NONE		2-11	31	NONE		NONE		NONE		NONE		NONE		NONE		NONE		
MIAMI BEACH	96	7-12	43	2-27	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
MIAMI WSO AP	93	7-11+	44	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
MIAMI 12 SSW	95	7-13+	35	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
POMPANO BEACH	98	5-27	39	2-11+	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
SOUTH MIAMI 5 W	95	5-27	36	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
STUART 1 N	97	9-29	36	2-26+	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
WEST PALM BEACH WSO AP	95	5-27+	38	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
* * *																													
KEYS	07																												
KEY WEST WSO AP	96	9-29+	51	2-27	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		
KEY WEST																													
MARATHON SHORES																													
TAVERNIER	93	9-29	44	2-11	NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		NONE		

See Reference Notes Following Station Index

# SOIL TEMPERATURES

FLORIDA 1974

Station	Depth Feet	Time	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
			Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes	Average	Extremes
CHIPLEY 3 E	4		64.3	75 49	57.2	71 38	66.1	85 43	69.3	89 52	78.3	98 61	84.6	104 67	86.6	103 73	83.3	100 74	81.7	97 67	70.8	87 34	-	-	-	-	-	104 38
GAINESVILLE 2 WSW	4		-	72 61	62.3	74 49	-	-	72.7	79 61	78.7	83 73	82.2	88 76	83.4	87 79	83.9	87 81	82.7	87 79	73.3	81 60	67.0	75 58	59.6	68 52	-	88 49
MILTON EXP STATION	8		-	71 64	61.6	71 54	-	-	72.3	76 67	77.9	80 73	80.8	83 76	82.0	84 79	82.2	84 81	81.7	84 79	73.4	80 70	67.9	74 61	59.7	64 55	-	84 54
MONTICELLO 3 W	4		67.6	78 53	60.8	74 40	72.1	91 48	75.8	98 54	85.0	104 63	90.3	108 74	91.6	109 77	88.4	107 75	86.0	104 67	75.9	94 53	63.8	89 43	56.6	75 39	76.1	109 39
QUINCY 3 SSW	4		66.8	80 48	59.2	73 39	67.4	88 44	73.3	93 50	80.9	101 61	85.7	103 70	86.4	102 74	83.0	100 72	83.0	99 67	71.5	89 53	62.3	87 43	54.5	73 39	73.0	103 39
	2		-	-	-	-	-	-	-	-	-	-	86.3	112 87	88.3	112 72	85.5	113 68	84.8	110 58	79.4	98 48	64.4	95 37	54.5	79 29	-	113 -
	4		-	-	-	-	-	-	-	-	-	-	84.4	107 68	86.6	108 73	83.9	108 71	83.1	105 62	73.1	93 49	64.1	90 40	54.2	74 35	-	108 -
	8		-	-	-	-	-	-	-	-	-	-	81.4	97 70	84.0	97 71	81.6	96 72	81.1	94 69	72.7	88 60	63.9	82 48	54.3	70 42	-	97 -

See Reference Notes Following Station Index

Table 4

## TOTAL EVAPORATION AND WIND MOVEMENT

FLORIDA  
1974

Station		Jan	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov	Dec	Annual
* * * NORTHWEST 01														
MILTON EXP STATION	EVAP	2.638	3.548	5.438	6.49	7.20	7.72	6.81	5.928	5.188	5.29	3.09	2.43	61.73
	WIND	-	-	17998	1825	1409	972	609	477	726	832	873	1299	-
	MAX	72.6	69.1	79.9	82.9	91.2	95.2	97.1	95.1	91.4	81.5	71.6	65.2	82.8
	MIN	58.2	47.1	55.7	58.1	66.8	68.9	72.3	72.7	69.0	55.0	50.5	47.5	60.2
WOODRUFF DAM	EVAP	2.288	3.728	5.19	6.438	7.03	8.018	7.43	6.37	6.438	6.21	3.77	2.428	65.29
	WIND	1123	2339	1822	2290	1379	1282	992	1074	1896	2018	1688	2046	19949
* * * NORTH 02														
GAINESVILLE 2 WSW	EVAP	3.17	4.14	5.69	7.55	7.92	7.018	6.44	5.75	5.60	5.48	3.76	3.008	65.51
	WIND	1206	1772	1772	1771	1385	1011	929	741	874	1757	1213	1192	15623
	MAX	76.4	70.3	79.0	83.6	90.4	92.4	91.9	93.7	92.4	80.3	73.0	65.2	82.4
	MIN	58.1	47.0	55.4	55.9	65.2	68.1	69.3	70.5	69.9	56.5	51.5	47.9	59.6
LAKE CITY 2 E	EVAP	2.938	4.18	6.188	7.308	7.418	7.658	8.048	6.688	5.438	5.398	3.658	2.538	67.37
	WIND	1434	1832	2023	1871	1609	1154	977	961	1186	1365	1156	1559	17127
	MAX	76.0	70.6	78.5	83.5	90.8	-	94.1	95.3	92.4	81.5	73.8	64.8	-
	MIN	57.7	45.8	53.8	56.1	65.9	-	71.9	71.7	70.9	58.7	50.3	46.3	-
* * * NORTH CENTRAL 03														
LISBON	EVAP	3.22	4.09	5.50	6.64	7.04	6.36	5.93	5.42	4.44	4.49	3.35	2.57	59.05
	WIND	495	865	760	820	715	455	430	335	350	515	435	665	6840
* * * SOUTH CENTRAL 04														
LAKE ALFRED EXP STA	EVAP	3.35	4.42	6.42	8.09	8.03	6.87	6.37	7.06	6.64	5.84	4.26	2.73	70.08
	WIND	965	1468	1880	1709	1271	1159	949	1037	1109	1560	1146	1161	15114
	MAX	74.4	69.2	77.8	80.6	87.4	89.1	90.3	89.9	88.9	78.1	72.5	63.2	80.1
	MIN	55.8	44.9	54.7	52.7	61.7	66.2	65.2	65.8	65.6	54.3	50.1	43.4	56.7
VERO BEACH 4 W	EVAP	2.698	4.328	6.348	6.468	7.86	6.168	5.438	5.978	5.578	5.208	3.24	2.888	62.12
	WIND	703	1336	1395	1014	831	548	3088	253	295	8768	792	806	9159
	MAX	78.5	75.6	85.1	87.0	91.7	92.7	91.5	95.5	95.3	83.8	78.2	69.8	85.4
	MIN	63.3	51.9	62.1	62.6	69.5	73.4	74.3	75.2	76.0	66.8	61.0	53.9	65.8
* * * EVERGLADES AND SW COAST 05														
BELLE GLADE EXP STA	EVAP	3.07	4.47	5.59	6.108	6.63	5.388	5.548	5.56	4.80	4.40	3.01	2.45	57.00
	DEP	.25	.43	.18	.27	.52	1.05	.82	.73	.58	.59	.85	.78	6.29
	MAX	81.5	77.1	87.0	89.1	95.4	95.1	95.1	95.7	94.9	83.6	78.5	72.9	87.2
	MIN	59.6	49.6	58.3	57.1	65.0	69.2	69.2	70.1	70.9	62.3	58.1	54.8	62.0
CLEWISTON U S ENG	EVAP	3.23	4.41	6.66	7.56	7.918	6.348	6.198	5.298	5.89	6.06	3.69	2.40	65.63
	DEP	.32	.87	1.78	1.94	1.58	.77	.93	.20	1.25	1.64	.19	.35	11.12
	WIND	335	1121	1017	1129	980	569	469	326	303	1235	701	605	8790
	MAX	81.2	78.4	89.1	91.7	95.6	96.1	97.3	97.2	-	88.1	83.0	75.2	-
FIAMINGO RANGFR STA	EVAP	-	52.2	63.2	63.4	69.1	72.5	73.1	74.2	-	66.5	60.7	54.6	-
	WIND	1522	-	-	-	-	-	7.198	-	-	-	-	5.068	-
	MAX	84.4	-	-	-	-	-	1154	12898	12808	15128	-	12478	-
	MIN	66.0	-	-	-	-	-	-	-	-	-	-	-	-
MOORE HAVEN LOCK 1	EVAP	4.27	5.148	7.84	8.79	8.92	7.008	7.178	7.318	7.148	7.02	5.04	3.20	78.84
	DEP	.67	.89	1.73	1.50	.82	.45	.23	.74	.82	1.45	.77	.30	8.87
	WIND	1021	1510	1800	1997	1495	995	805	1310	1455	2590	1640	1250	17868
	MAX	82.9	79.3	87.5	88.9	94.4	95.6	97.8	97.1	98.6	86.9	82.0	75.8	88.9
TAMIAHI TRI 40 MI BEND	EVAP	3.65	4.21	5.14	6.568	6.388	4.408	5.868	6.348	5.44	5.63	4.778	3.288	61.66
	DEP	.27	.16	.47	.08	.66	2.08	.53	.07	.15	.56	.90	.14	1.71
	WIND	842	1139	1046	1343	1132	770	630	7318	607	1512	979	981	11712
	MAX	84.4	80.3	88.4	88.0	92.5	91.4	94.6	95.9	98.7	91.0	85.9	79.6	89.2
* * * LOWR EAST COAST 06														
FT LAUDERDALE EXP STA	EVAP	3.838	4.108	7.018	8.588	9.268	6.468	-	-	-	-	-	-	-
	WIND	11848	1512	15578	-	-	-	-	-	-	-	-	-	-
HIALEAH	EVAP	4.198	-	-	-	7.898	6.968	7.078	8.028	-	-	4.888	5.158	-
	DEP	.41	-	-	-	.29	.03	.25	1.17	-	-	.63	1.69	-
	WIND	209	-	-	-	-	-	-	-	-	-	-	-	-
	MAX	-	-	-	-	92.3	94.4	94.7	96.6	-	87.3	81.7	78.0	-
						</								

See Reference Notes Following Station Index

# STATION INDEX

FLORIDA  
1974

Station	Index No.	Division No.	County	Drainage	Latitude	Longitude	Elevation	Years of record			Opened or closed during yr.		Refer to tables
								Temp.	Precip.	Evap.	Month opened	Month closed	
ALEXANDER SPRINGS 3 SE	0070	03	LAKE	8	29 03	81 33	65	16	16		FEB		1 2 3
APALACHICOLA WSO CI R	0211	01	FRANKLIN	5	29 44	84 59	13	72	72				1 2 3 C
ARCADIA	0228	04	DE SOTO	5	27 14	81 51	63	71	74				1 2 3
ARCHBOLD BIOLOGIC STA	0236	04	HIGHLANDS	7	27 11	81 21	140	6	6				1 2 3
AVON PARK 2 W	0369	04	HIGHLANDS	7	27 36	81 32	154	82	77				1 2 3
BABSON PARK	0390	04	POLK	7	27 50	81 31	145		20				2
BARTON	0478	04	POLK	5	27 54	81 51	120	88	88				1 2 3
BELLE GLADE EXP STA	0611	05	PALM BEACH	7	26 40	80 38	16	50	50	34			1 2 34
BELLE GLADE HRCN GATE	0616	05	PALM BEACH	7	26 42	80 43	31						C
BITHLO	0758	03	ORANGE	8	28 33	81 07	65		16				2
BLACKMAN 3 NNW	0765	01	OKALOOSA	5	30 57	86 41	220						C
BLOUNTSTOWN	0804	01	CALHOUN	1	30 27	85 03	60	62	62				1 2 3
BOCA RATON	0845	06	PALM BEACH	2	26 22	80 05	13						C
BRADENTON 5 ESE	0945	04	MANATEE	5	27 27	82 28	20	10	10				1 2 3
BRISTOL	1020	01	LIBERTY	1	30 25	84 59	160						C
BROOKSVILLE CHIN HILL	1046	03	HERNANDO	5	28 37	82 22	240	82	82				1 2 3
BROOKSVILLE 7 SSW	1048	03	HERNANDO	5	28 28	82 27	67						C
BUSHNELL 2 E	1163	03	SUINTER	5	28 40	82 05	75	38	38				1 2 3
CANAL POINT GATE 3	1271	05	PALM BEACH	7	26 52	80 38	36						C
CANAL POINT USDA	1276	05	PALM BEACH	7	26 52	80 37	30	22	22				1 2 3
CARRABELLE 1 NNW	1356	01	FRANKLIN	5	29 52	84 40	10	76	76				1 2 3
CARYVILLE	1388	01	WASHINGTON	3	30 46	85 49	50		46				2
CEDAR KEY 1 WSW	1432	02	LEVY	5	29 08	83 03	7	86	87				1 2 3
CHIPLEY 3 E	1544	01	WASHINGTON	3	30 47	85 29	130	36	36				1 2 3 G
CLEARWATER	1632	04	PINELLAS	5	27 58	82 46	65	15	15				1 2 3
CLERMONT 6 SSW	1641	03	LAKE	8	28 29	81 47	125	82	82				1 2 3
CLEWISTON U S ENG	1654	05	HENDRY	7	26 45	80 55	20	26	26	34			1 2 34C
CORNWELL 4 NW	1869	04	HIGHLANDS	7	27 24	81 10	40		20				2
CRESCENT CITY	1978	02	PUTNAM	8	29 26	81 31	58		76				2
CRESTVIEW RADIO WJSB	1984	01	OKALOOSA	5	30 46	86 35	240	16	16		DEC		1 2 3 C
CROSS CITY 2 NNW	2008	02	DIXIE	5	29 39	83 10	42	15	15				1 2 3 C
DANIA 4 NNW	2114	06	BROWARD	2	26 04	80 12	7		34		APR		2
DAYTONA BEACH WSO AP R	2158	03	VOLUSIA	2	29 11	81 04	30	61	61				1 2 3 C
DE FUNIAK SPRINGS	2220	01	WALTON	3	30 44	86 07	230	76	76				1 2 3
DELAND 1 SSE	2229	03	VOLUSIA	8	29 01	81 18	25	76	72				1 2 3
DE SOTO CITY 8 SW	2288	04	HIGHLANDS	7	27 22	81 31	85		20				2
DEVILS GARDEN TOWER	2298	05	HENDRY	7	26 30	81 08	20	19	19				1 2 3
DOWLING PARK 1 W	2391	02	LAFAYETTE	10	30 15	83 15	54						C
EVA	2834	03	LAKE	5	28 23	81 49	117		11				2
EVERGLADES	2850	05	COLLIER	4	25 51	81 23	5	48	48				1 2 3
FEDERAL POINT	2915	02	PUTNAM	8	29 45	81 32	5	83	83				1 2 3
FELLSMERE 7 SSW	2936	04	INDIAN RIVER	2	27 41	80 39	20	62	62				1 2 3
FERNANDINA BEACH	2944	02	NASSAU	2	30 39	81 28	13	78	78				1 2 3
FLAMINGO RANGER STA	3020	05	MONROE	5	25 09	80 55	3	23	23	13			1 2 34
FORT DRUM 5 NW	3137	04	OKEECHOBEE	7	27 35	80 50	71	19	19				1 2 3
FORT GREEN 12 WSW	3153	04	MANATEE	5	27 34	82 08	112		20				2
FORT LAUDERDALE	3163	06	BROWARD	2	26 06	80 12	16	61	61				1 2 3
FT LAUDERDALE EXP STA	3171	06	BROWARD	2	26 05	80 15	6	22	22	22			1 2 34
FORT MYERS WSO AP R	3186	05	LEE	5	26 35	81 52	15	83	83				1 2 3 C
FORT PIERCE	3207	04	ST LUCIE	2	27 28	80 21	25	74	74				1 2 3
FOUNTAIN 3 SSE	3230	01	BAY	5	30 26	85 25	140	20	20				1 2 3
GAINESVILLE 2 WSW	3321	02	ALACHUA	8	29 38	82 22	92	21	21	21			1 2 34CG
GLEN ST MARY 1 W	3470	02	BAKER	9	30 16	82 11	128	79	79				1 2 3
GRACEVILLE	3538	03	JACKSON	3	30 58	85 31	155						C
GRADY	3543	02	LAFAYETTE	10	29 57	82 57	30						C
HART LAKE	3840	03	ORANGE	7	28 23	81 11	60		32				2
HIALEAH	3909	06	DADE	2	25 50	80 17	12	34	34				1 2 34
HIGH SPRINGS	3956	02	ALACHUA	10	29 30	82 36	65	30	30				1 2 3
HILLSBOROUGH RVR ST PK	3986	03	HILLSBOROUGH	5	28 09	82 14	53		30				2
HOMESTEAD EXP STA	4091	06	DADE	2	25 30	80 30	11	64	64				1 2 3 C
IMMOKALEE 3 NNW	4210	05	COLLIER	5	26 28	81 26	35	5	5				1 2 3
INDIAN LAKE ESTATES	4242	04	POLK	7	27 48	81 21	85	17	17				1 2 3
INGLIS 5 SSW	4273	02	CITRUS	5	28 58	82 42	5						C
INVERNESS	4289	03	CITRUS	5	28 50	82 20	50	75	75				1 2 3
ISLAND GROVE	4327	02	ALACHUA	8	29 27	82 06	74		20				2
ISLEWORTH	4332	03	ORANGE	8	28 29	81 32	115		57				2
JACKSONVILLE WSO AP R	4358	02	DUVAL	8	30 30	81 42	26	38	38				1 2 3 C
JACKSONVILLE BEACH	4366	02	DUVAL	2	30 17	81 24	10	33	33				1 2 3
JASPER	4394	02	HAMILTON	10	30 31	82 57	147	62	62				1 2 3
KENDALL 2 E	4518	06	DADE	2	25 41	80 17	18		33		APR		2
KEY WEST WSO AP	4570	07	MONROE	5	24 33	81 45	4	30	30				1 2 3 C
*KEY WEST	4575	07	MONROE	5	24 34	81 48	6		104				1 2 3
KISSIMHIE NO. 2	4625	04	OSCEOLA	7	28 17	81 25	60	79	84				1 2 3
LA BELLE	4662	05	HENDRY	5	26 45	81 26	16	44	44				1 2 3
LAKE ALFRED EXP STA	4707	04	POLK	5	28 06	81 43	145	58	58	8			1 2 34
LAKE CITY 2 E	4731	02	COLUMBIA	10	30 11	82 36	195	91	91	8			1 2 34
*LAKELAND WSO CI R	4797	04	POLK	5	28 02	81 57	214	59	59				1 2 3 C
LIGNUMVITAE KEY	5035	07	MONROE	2	24 34	80 42	10						C
LISBON	5076	03	LAKE	8	28 52	81 47	68	16	16	15			1 2 34C
LIVE OAK	5099	02	SUWANNEE	10	30 17	82 58	120	23	23				1 2 3

# STATION INDEX

FLORIDA  
1974

Station	Index No.	Division No.	County	Drainage	Latitude	Longitude	Elevation	Years of record			Opened or closed during yr.		Refer to tables
								Temp.	Precip.	Evap.	Month opened	Month closed	
LOXAHATCHEE	5182	06	PALM BEACH	7	26 41	80 16	14	34	34				1 2 3 C
LYNNE	5237	03	MARION	8	29 12	81 56	85						C
MADISON	5275	02	MADISON	10	30 28	83 25	190	71	74				1 2 3
MARATHON SHORES	5351	07	MONROE	5	24 44	81 03	8	25	25				1 2 3
MARINELAND	5391	02	FLAGLER	2	29 40	81 13	5						C
MAYO	5539	02	LAFAYETTE	10	30 03	83 10	65	25	25				1 2 3
MELBOURNE	5612	04	BREVARD	2	28 04	80 37	10	37	37				1 2 3 C
MIAMI BAYFRONT PARK	5653	06	DADE	2	25 47	80 11	6	21	21		APR		1 2 3
MIAMI BEACH	5658	06	DADE	2	25 47	80 08	5	34	34				1 2 3 C
MIAMI WSO AP	5663	06	DADE	2	25 48	80 16	7	36	36				1 2 3 C
MIAMI WSO C1	5668	06	DADE	2	25 43	80 17	15						C
MIAMI 12 SSW	5678	06	DADE	2	25 39	80 18	10	51	51				1 2 3
MILTON EXP STATION	5793	01	SANTA ROSA	5	30 47	87 08	217	27	27	13			1 2 34 C
MONTECELLO 3 W	5879	01	JEFFERSON	5	30 32	83 55	145	71	71				1 2 3 CG
MOORE HAVEN LOCK 1	5895	05	GLADES	7	26 50	81 05	22	56	56	34			1 2 34C
MOUNTAIN LAKE	5973	04	POLK	7	27 56	81 36	125	53	53				1 2 3
MYAKKA RIVER ST PARK	6065	04	SARASOTA	5	27 14	82 19	20	19	31				1 2 3
NAPLES 2 NE	6078	05	COLLIER	5	26 10	81 47	4	34	34				1 2 3
NICEVILLE	6240	01	OKALOOSA	5	30 31	86 30	60	48	48				1 2 3 C
NORTH NEW RVR CANAL 2	6323	05	BROWARD	7	26 20	80 32	16						C
OCALA	6414	03	MARION	5	29 12	82 05	75	76	84				1 2 3
OKEECHOBEE 9 W	6480	04	OKEECHOBEE	7	27 14	80 58	20	4	11		NOV	OCT	1 2 3
OKEECHOBEE HRCN GATE 6	6485	04	OKEECHOBEE	7	27 13	80 48	45	50	52				1 2 3
ORANGE CITY	6584	03	VOLUSIA	8	28 56	81 18	52						C
ORLANDO WSO MCCOY	6628	03	ORANGE	8	28 26	81 20	85	1	1		FEB		1 2 3 C
ORTONA LOCK 2	6657	05	GLADES	7	26 47	81 18	20						C
PALATKA	6753	02	PUTNAM	8	29 39	81 39	20	49	49				1 2 3
PANACEA 4 SSE	6828	01	WAKULLA	5	29 58	84 22	10						C
PANAMA CITY 5 NE	6842	01	BAY	5	30 13	85 36	32	4	4				1 2 3 C
PARRISH	6880	04	MANATEE	5	27 35	82 26	45	17	17				1 2 3 C
PENNSUCO 5 WNW	6988	05	DADE	2	25 56	80 27	10						C
PENSACOLA WSO AP	6997	01	ESCAMBIA	5	30 28	87 12	112	30	30				1 2 3
PERRINE	7020	06	DADE	2	25 36	80 21	10		14		DEC	APR	2
PERRY	7025	02	TAYLOR	5	30 08	83 36	45	52	52				1 2 3
PLANT CITY	7205	04	HILLSBOROUGH	5	28 01	82 08	121	78	78				1 2 3
POMPANO BEACH	7254	06	BROWARD	2	26 14	80 09	15	34	34		JUL		1 2 3
PORT MAYACA S L CANAL	7293	05	MARTIN	7	26 58	80 27	39						C
PUNTA GORDA 4 ENE	7397	05	CHARLOTTE	5	26 58	81 59	10	10	10				1 2 3
QUINCY 3 SSW	7429	01	GADSDEN	6	30 36	84 33	245	7	7				1 2 3 C
RAIFORD STATE PRISON	7440	02	UNION	10	30 04	82 11	120						C
ROYAL PALM RANGER STA	7760	06	DADE	5	25 23	80 36	7		26		MAY		2
ST AUGUSTINE WFOY	7826	02	ST JOHNS	2	29 54	81 19	8	2	2				1 2 3
SAINT LEO	7851	03	PASCO	5	28 20	82 16	190	80	82				1 2 3 C
ST LUCIE NEW LOCK 1	7859	06	MARTIN	2	27 07	80 17	15						C
ST MARKS 5 SSE	7867	01	WAKULLA	5	30 06	84 10	10	47	47				1 2 3
ST PETERSBURG	7886	04	PINELLAS	5	27 46	82 38	8	60	60				1 2 3 C
SANFORD EXP STATION	7982	03	SEMINOLE	8	28 48	81 14	15	19	19				1 2 3
SARASOTA	8021	04	SARASOTA	5	27 21	82 32	30	26	26				1 2 3
SMITH CREEK	8290	01	WAKULLA	6	30 12	84 40	60	5	5				1 2 3
SOUTH MIAMI 5 W	8396	06	DADE	2	25 42	80 21	8	21	21				1 2 3
STARKE	8527	02	BRADFORD	8	29 56	82 06	162	17	17				1 2 3
STEINHATCHEE 6 ENE	8565	02	DIXIE	5	29 42	83 18	35	17	17				1 2 3
STUART 1 N	8620	06	MARTIN	2	27 13	80 15	10	39	39				1 2 3
TALLAHASSEE WSO AP	8758	01	LEON	5	30 23	84 22	55	88	90				1 2 3 C
TAMPA TRL 40 MI BEND	8780	05	DADE	4	25 45	80 50	15	33	33	34			1 2 34C
TAMPA WSO AP	8788	04	HILLSBOROUGH	5	27 58	82 32	19	85	85				1 2 3 C
TARPON SPGS SEWAGE PL	8824	04	PINELLAS	5	28 09	82 45	8	89	84				1 2 3
TAVERNIER	8841	07	MONROE	2	25 01	80 31	5	38	38				1 2 3
TITUSVILLE	8942	03	BREVARD	2	28 35	80 50	30	80	82				1 2 3
TRAIL-GLADE RANGES	9010	05	DADE	2	25 46	80 29	13						C
USHER TOWER	9120	02	LEVY	5	29 25	82 49	33	19	19				1 2 3
VENICE	9176	04	SARASOTA	5	27 06	82 26	8	20	20				1 2 3 C
VENUS 4 SSW	9184	05	GLADES	7	27 02	81 21	62						C
VERD BEACH 4 W	9219	04	INDIAN RIVER	2	27 38	80 27	20	10	10	10			1 2 34C
WAUCHULA 2 N	9401	04	HARDEE	5	27 34	81 49	119	42	42				1 2 3
WAUSAU 2 SSW	9415	01	WASHINGTON	3	30 37	85 35	145						C
WEEKI WACHEE	9430	03	HERNANDO	5	28 31	82 35	20	6	6				1 2 3
WEST PALM BEACH WSO APR	9525	06	PALM BEACH	2	26 41	80 06	15	36	36				1 2 3 C
WEWAHITCHKA	9566	01	GULF	1	30 07	85 12	45	19	19				1 2 3
WINTER HAVEN	9707	04	POLK	5	28 01	81 45	136	34	34				1 2 3
WOODRUFF DAM	9795	01	GADSDEN	1	30 49	84 52	107	19	19	16			1 2 34C

# REFERENCE NOTES

FLORIDA  
1974

Additional information regarding the climate of this State may be obtained by writing to the National Climatic Center, Asheville, N.C. 28801, or to any National Weather Service Office near you. Additional precipitation data are contained in "HOURLY PRECIPITATION DATA" for this State.

AVERAGES: Division averages in the annual issue include delayed and corrected data and may differ slightly from values published in monthly issues.

DIMENSIONAL UNITS. Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F, precipitation and evaporation in inches, and wind movement in miles.

EVAPORATION is measured in the standard Weather Service type pan of 4-foot diameter unless otherwise shown by footnote following the Evaporation and Wind table. Max and Min values in the Evaporation and Wind table are monthly averages of daily extremes of temperature of water in pan as recorded during 24 hours ending at time of observation. Wind is the total wind movement in miles over the evaporation pan as determined by a continuous anemometer recorder located 6-8 inches above the pan.

NORMALS for all stations are climatological normals based on the period 1941-1970. "DEP" in Table 4 refers to departures from long-term means based on periods varying from 10 to 29 years which are used in place of normals.

DIVISIONS, as used in this publication, became effective with data for May 1956.

STATION NAMES: Figures and letters following the station name, such as 12 SSW, indicate distance in miles and direction from the post office.

LATE REPORTS AND CORRECTIONS will be carried in the June and December issues of Climatological Data.

<b>DAILY SOIL TEMPERATURES TABLE:</b>	Chipley 3 E	: Sandy loam soil, bare, 5 percent slope to the northwest. Palmer mercury-in-steel thermometer. Max and min for 24 hour period ending at 7:30 a.m.
	Gainesville 2 WSW	: Arredonda fine sand, Bahia grass sod covered, Little slope. Palmer dial type thermometers. Max and min for 24 hour period ending at 4:30 p.m.
	Milton Exp Station	: Sandy loam soil, bare. 2 percent slope to the east. Palmer mercury-in-steel thermometer. Max and min for 24-hour period ending at 4 p.m.
	Monticello 3 W	: Sandy loam soil, bare. 2 percent slope to the north. Palmer mercury-in steel thermometer. Max and min for 24-hour period ending 8 a.m.
	Quincy 3 SSW	: Orangeburg loamy fine sand, bare. 0-2 percent slope direction unknown. Palmer dial type thermometers.

IN THE DATA TABLES THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- No record.
- + Also on earlier date (dates) or months.
- \* Amount included in following measurement.
- // Gage is equipped with a windshield.
- B Adjusted to a full month.
- E Amount is wholly or partially estimated.
- M One or more days record missing; if average value is entered, less than 10 days record is missing. See monthly Climatological Data for detailed daily record.
- R Amounts from recording gage. (The amounts are essentially accurate but may vary slightly from the amounts to be published later in Hourly Precipitation Data.)
- T Trace, an amount too small to measure.
- V Includes total for previous month. V in annual column means total is for a two year period.

IN THE STATION INDEX THE SYMBOLS AND LETTERS WHEN USED INDICATE THE FOLLOWING:

- # Thermometers are generally exposed in a shelter located a few feet above sod covered ground; however, the reference indicates that the thermometers are exposed in a shelter located on the roof of a building.
- ‡ DRAINAGE CODE: 1-APALACHICOLA 2-ATLANTIC 3-CHOCTAWHATCHEE 4-EVERGLADES 5-GULF 6-OCHLOCKONEE 7-OKEECHOBEE 8-ST. JOHNS 9-ST. MARY 10-SUWANNEE
- C Data for recording rain gage stations processed for special purposes and published in Hourly Precipitation Data. Length of record for recorder-only stations may be found in the annual issue of Hourly Precipitation Data.
- G Soil temperatures published.

Years of record as shown in the Station Index are approximate since gaps in records may not have been considered in arriving at the totals shown.

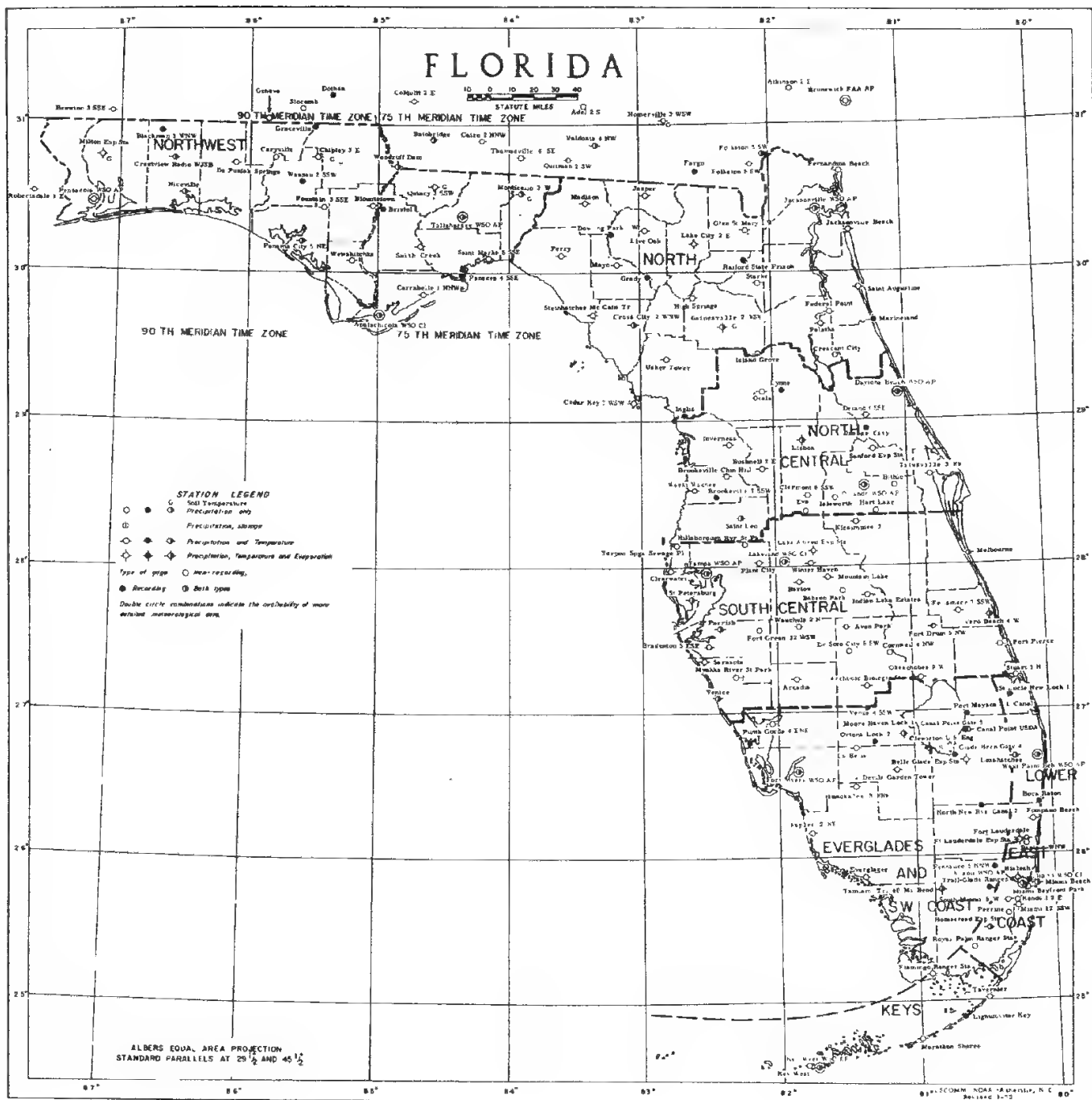
Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1955 may be found in the publication "Substation History" for this State, price 35 cents. Similar information for regular National Weather Service Offices may be found in the latest annual issue of Local Climatological Data, price 15 cents. These publications may be obtained from the National Climatic Center at the address shown above.

Subscription Price: \$4.50 a year for each section including annual summary, \$4.70 additional for foreign mailing. 35¢ single copy, 30¢ annual summary. Make checks payable to Department of Commerce, NOAA; send payments and orders to: National Climatic Center, Federal Building, Asheville, N. C. 28801. Attn: Publications.

I certify that this is an official publication of the National Oceanic and Atmospheric Administration, and is compiled from records on file at the National Climatic Center, Asheville, North Carolina 28801.

*William H. Haggard*  
Director, National Climatic Center

USCOMM-NOAA-ASHEVILLE, N. C. 2/26/75-1300





Station: BELLE GLADE, FLORIDA

Drainage Basin: Lake Okeechobee  
Lat. 26° 40' Long. 80° 38'

County: PALM BEACH  
Elev. (ft.) 16

# CLIMATOLOGICAL SUMMARY

(Based on U. S. Weather Bureau Cooperative Observers' record, 1924-1952)

## TEMPERATURE

	Average			Extremes				Avg. No. of days	
	Max.	Min.	Mean	Highest	Year	Lowest	Year	90° or above	32° or below
Jan.	75.5	54.2	64.9	89	1929	24	1940	0	1
Feb.	76.9	53.8	65.4	92	1928	27	1947	*	*
Mar.	79.5	56.3	67.9	93	1928	27	1941	*	*
Apr.	82.9	60.3	71.6	95	1945	33	1931	3	0
May	86.5	64.7	75.6	95	1950%	44	1928	9	0
June	88.5	70.1	79.3	98	1950	54	1933%	18	0
July	90.5	72.1	81.3	100	1931	62	1931	22	0
Aug.	90.5	72.8	81.7	99	1931	61	1945	24	0
Sep.	85.3	69.4	77.4	96	1942	62	1931	15	0
Oct.	84.4	68.5	76.5	94	1950%	40	1943	2	0
Nov.	78.7	60.6	69.7	91	1948	32	1940	*	*
Dec.	76.0	55.6	65.8	89	1941	25	1934	0	*
Year	82.9	63.2	73.1	100	1931	24	1940	93	1

\*Less than one half

%Also in earlier years

## RAINFALL

	Average	Greatest day amount & Year	Greatest month amount & year	Lowest Month amount & year	Average No. days .01 or more
Jan.	1.59	3.42 - 1948	5.39 - 1926	0.11 - 1939	6
Feb.	1.66	2.67 - 1952	5.55 - 1941	0.03 - 1944	5
Mar.	3.02	6.53 - 1947	10.97 - 1947	0.33 - 1945	7
Apr.	3.36	4.12 - 1941	8.22 - 1948	0.01 - 1946	7
May	4.17	2.65 - 1951	9.38 - 1925	1.08 - 1935	9
June	9.51	6.96 - 1942	24.11 - 1942	0.59 - 1931	16
July	8.25	3.78 - 1944	15.30 - 1951	3.23 - 1931	18
Aug.	8.28	6.74 - 1949	16.38 - 1944	2.65 - 1938	17
Sep.	9.00	7.10 - 1948	19.28 - 1948	2.70 - 1950	17
Oct.	5.22	4.80 - 1924	15.84 - 1924	0.49 - 1925	11
Nov.	2.34	10.90 - 1932	12.44 - 1932	0.15 - 1939	6
Dec.	1.49	3.98 - 1940	7.09 - 1949	0.06 - 1951	6
Year	57.89	10.90 - 1932	24.11 - 1942	0.01 - 1946	125

MONTHLY AND ANNUAL MEAN TEMPERATURES. BELLE GLADE, PALM BEACH COUNTY, FLORIDA  
Compiled at Weather Bureau Office, Jacksonville, Fla.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
1924	-----	-----	-----	-----	-----	80.2	80.2	81.9	79.0	74.2	68.4	67.2	-----
1925	67.2	62.1	64.8	67.9	72.7	77.4	79.4	80.0	79.7	76.3	67.6	64.2	71.6
1926	61.6	61.6	63.1	70.6	73.2	77.4	79.6	81.6	81.2	76.6	68.3	66.2	71.8
1927	60.0	67.0	65.6	69.8	75.4	80.0	80.0	80.5	78.6	75.0	68.4	62.2	71.9
1928	59.0	66.6	69.2	70.4	71.5	78.0	79.7	80.2	79.5	77.1	67.8	64.0	71.9
1929	67.4	66.4	68.4	71.2	75.2	77.0	78.2	79.8	79.0	71.8	71.5	62.8	72.4
1930	66.6	64.5	63.6	69.5	74.6	77.0	80.2	80.0	79.4	73.4	65.8	59.2	71.2
1931	58.7	61.4	60.4	66.7	72.3	78.0	82.2	81.8	79.6	75.0	69.4	70.6	71.3
1932	66.8	68.4	64.8	69.7	73.9	77.4	79.6	79.4	78.2	74.6	65.8	67.1	72.1
1933	64.8	68.0	65.2	71.2	76.4	76.6	79.9	79.4	80.2	76.1	65.4	64.7	72.3
1934	63.7	62.4	66.6	70.2	75.4	78.2	79.2	79.9	79.8	76.0	68.0	63.4	71.9
1935	63.0	63.0	69.0	71.1	76.1	77.4	79.4	80.0	79.0	75.8	68.6	56.6	71.6
1936	64.5	63.8	65.7	70.6	73.8	77.0	81.2	80.6	79.2	78.0	68.0	67.1	72.5
1937	70.8	64.6	66.1	70.3	74.0	78.2	80.0	80.4	78.8	73.8	67.0	63.2	72.3
1938	62.6	65.2	68.0	69.8	75.4	77.6	79.0	79.8	78.5	72.6	71.1	63.7	71.9
1939	64.0	70.0	70.0	72.4	74.4	78.4	79.7	79.0	79.8	76.5	67.4	62.4	72.8
1940	56.2	60.4	65.8	68.3	72.6	79.0	81.0	80.8	78.0	72.9	68.5	68.4	71.0
1941	62.4	60.6	63.8	71.4	72.9	79.7	81.0	82.2	80.4	78.3	71.2	69.1	72.8
1942	61.4	59.0	66.3	69.2	74.8	79.6	82.6	81.2	80.6	74.8	68.8	66.5	72.1
1943	65.3	61.0	68.0	69.8	75.6	78.2	79.6	80.2	79.4	72.6	68.0	63.6	71.8
1944	62.2	67.6	70.4	73.2	73.4	80.0	80.8	80.4	80.1	72.6	66.0	61.8	72.4
1945	62.6	66.7	70.4	75.0	73.9	79.4	79.8	80.6	80.0	76.2	67.4	63.2	72.9
1946	64.4	66.2	69.4	71.1	76.3	78.2	80.0	80.4	79.8	76.2	73.7	69.4	73.8
1947	70.0	58.0	65.4	76.2	76.0	78.6	79.5	81.8	80.4	77.0	73.8	67.6	73.7
1948	63.4	67.9	73.5	73.2	76.7	79.4	80.4	80.3	79.4	75.5	75.2	69.9	74.6
1949	66.1	70.7	66.9	72.7	75.3	78.7	80.6	80.5	80.1	76.9	65.5	67.8	73.5
1950	69.3	66.2	68.7	67.1	76.8	80.3	80.2	80.3	80.2	76.6	66.1	60.2	72.6
1951	61.3	62.1	66.8	69.7	73.5	78.0	78.8	80.7	79.9	75.5	67.5	67.6	71.8
1952	63.6	61.5	67.2	66.8	74.5	79.9	79.9	80.5	79.7	75.8	68.8	61.2	71.6

MONTHLY AND ANNUAL RAINFALL, (INCHES AND HUNDREDTHS) BELLE GLADE, FLORIDA  
Compiled at Weather Bureau Office, Jacksonville, Fla.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
1924	—	—	—	—	—	4.83	6.59	3.72	8.49	15.84	0.62	0.22	—
1925	3.53	2.43	2.37	3.78	9.38	5.61	5.56	12.36	4.17	0.49	1.14	2.84	53.66
1926	5.39	0.66	1.48	1.81	3.69	9.29	10.57	10.40	13.60	3.58	0.91	0.55	61.93
1927	0.32	2.90	2.18	2.44	3.19	7.08	12.77	11.45	6.41	4.50	0.43	0.42	54.09
1928	0.31	1.66	3.83	1.78	2.61	9.20	8.11	11.31	15.64	3.26	1.07	0.25	59.03
1929	1.20	0.49	1.52	2.34	3.40	11.11	7.32	3.34	15.93	4.73	4.13	0.88	56.39
1930	1.92	2.40	6.32	6.03	3.35	20.21	6.48	3.74	3.58	4.94	0.56	3.54	63.07
1931	2.31	1.17	3.93	4.41	3.11	0.59	3.23	7.36	10.68	4.16	0.51	1.11	42.57
1932	1.72	2.13	1.56	1.54	4.69	15.90	4.29	10.59	7.43	2.30	12.44	0.50	65.09
1933	0.64	0.38	5.38	6.90	4.04	9.51	3.85	12.75	11.89	5.30	4.50	0.12	65.26
1934	0.14	1.91	7.10	3.11	5.20	10.15	10.09	12.41	7.44	3.22	0.65	0.82	62.24
1935	0.30	1.32	0.41	5.32	1.08	8.45	6.37	6.54	10.88	5.71	0.36	2.07	48.81
1936	1.91	4.04	2.40	1.96	6.39	18.61	6.09	5.33	5.84	1.65	9.17	1.18	64.57
1937	2.97	1.21	5.87	6.00	3.38	7.74	7.65	7.89	8.35	4.92	2.08	0.38	58.44
1938	0.46	1.14	1.87	0.32	4.52	5.44	8.85	2.65	10.09	2.78	2.66	0.21	40.95
1939	0.11	0.04	0.63	3.74	5.60	11.49	10.30	9.78	5.60	6.59	0.15	1.46	55.49
1940	3.34	2.72	4.20	1.63	3.00	10.18	4.39	8.13	8.11	2.29	0.48	6.47	54.94
1941	4.48	5.55	3.17	6.40	3.37	6.84	11.33	4.22	5.89	8.57	2.13	1.58	63.53
1942	1.81	2.35	5.20	6.02	3.91	24.11	6.41	4.36	7.85	0.57	0.88	2.35	65.82
1943	0.72	0.43	1.59	2.37	5.16	4.94	9.14	7.41	5.18	3.23	2.85	0.18	43.20
1944	0.97	0.03	1.73	4.13	5.57	3.48	6.55	16.38	4.41	8.09	0.45	0.33	52.12
1945	2.10	0.36	0.33	0.90	2.52	8.49	13.05	6.28	13.38	2.81	1.52	1.91	50.65
1946	0.73	0.52	7.06	0.01	6.62	9.70	14.26	9.58	11.42	1.04	7.14	2.86	70.94
1947	0.57	2.17	10.97	1.80	5.34	15.20	14.22	6.53	15.35	7.23	3.94	1.36	84.68
1948	4.63	0.66	0.89	8.22	3.11	3.84	7.43	9.95	19.28	2.23	1.86	0.88	62.98
1949	0.12	0.31	0.37	2.71	2.78	9.29	5.44	11.67	8.95	3.02	1.78	7.09	53.53
1950	0.24	0.80	0.82	2.41	4.61	6.92	6.27	10.00	2.70	12.65	2.43	1.18	51.03
1951	0.20	1.71	0.45	3.58	3.85	10.12	15.30	7.61	5.76	12.77	0.77	0.06	62.18
1952	1.45	4.95	0.92	2.53	3.17	7.58	7.24	6.44	9.73	12.98	0.39	0.37	57.75

Observations were made by the Everglades Experiment Station.

FLOU94

## SOIL INTERPRETATIONS RECORD

MARGATE SERIES

MLRA(S): 155, 156A, 156B

REV. ACH 12-81

MOLIC PSAMMAQUENTS, SILICEOUS, HYPERTHERMIC

THESE ARE NEARLY LEVEL POORLY DRAINED SANDY SOILS THAT ARE UNDERLAIN BY LIMESTONE AT DEPTHS OF 20 TO 40 INCHES. IN A REPRESENTATIVE PROFILE, THE SURFACE LAYER IS VERY DARK GRAY FINE SAND ABOUT 8 INCHES THICK. THE SUBSURFACE LAYER IS LIGHT BROWNISH GRAY FINE SAND ABOUT 8 INCHES THICK. IT IS UNDERLAIN BY ABOUT 16 INCHES OF BROWN FINE SAND. LIMESTONE IS AT A DEPTH OF 32 INCHES. SLOPE GRADIENTS ARE LESS THAN 2 PERCENT.

ESTIMATED SOIL PROPERTIES											
DEPTH (IN.)	USDA TEXTURE	UNIFIED	AASHTO	FRAC >3 IN	PERCENT OF MATERIAL LESS THAN 3" PASSING SIEVE NO.					LIQUID LIMIT	PLAS- TICITY
				(PCT)	4	10	40	200		INDEX	
0-8	YS, S	SP, SP-SM	A-3	0	100	100	95-100	2-8	-	NP	
8-16	YS, S	SP, SP-SM	A-3	0	100	100	95-100	2-8	-	NP	
16-28	YS, S	SP, SP-SM	A-3	0	100	100	95-100	2-8	-	NP	
28-32	GR-VAR	GM, GC, SM, SC	A-1-B, A-2-4, A-2-6	35-85	60-80	45-60	40-55	5-35	<40	NP-15	
32	UWB										

DEPTH (IN.)	CLAY (PCT)	MOIST BULK DENSITY	PERME- ABILITY	AVAILABLE WATER CAPACITY	SOIL REACTION	SALINITY (MMHOS/CM)	SHRINK- SWELL	EROSION FACTORS	WIND EROD. MATTER	ORGANIC MATTER	COMBUSTIVITY		
0-8	1-4	(C/CM3) 1.25-1.45	(IN/HR) 6.0-20	(IN/IN) 0.05-0.10	(PH) 4.5-6.0	-	POTENTIAL LOW	K .10	Y 3	GROUP 2	(PCT) 1-4	STEEL HIGH	CONCRETE MODERATE
8-16	0-4	1.55-1.65	6.0-20	0.03-0.06	5.1-6.5	-	LOW	.10					
16-28	1-4	1.55-1.65	6.0-20	0.03-0.06	6.1-7.8	-	LOW	.10					
28-32	3-10	1.55-1.65	6.0-20	0.03-0.10	7.4-8.4	-	LOW	.17					
32													

FLOODING		HIGH WATER TABLE		CEMENTED FAN		BEDROCK		SUBSIDENCE		HYDRO- POTENTIAL	
FREQUENCY	DURATION	DEPTH (FT)	KIND	MONTHS	DEPTH (IN)	HARDNESS (IN)	DEPTH (IN)	HARDNESS (IN)	INIT. (IN)	TOTAL (IN)	CRP ACTION
NONE				1-1.0	APPARENT	JUN-FEB	-	120-40	SOFT	-	15/D

SANITARY FACILITIES (A)		CONSTRUCTION MATERIAL (A)	
SEPTIC TANK ABSORPTION FIELDS	SEVERE-DEPTH TO ROCK, PONDING, POOR FILTER	ROADFILL	POOR-AREA RECLAIM, WEINESS
SEWAGE LAGOON AREAS	SEVERE-SEEPAGE, DEPTH TO ROCK, PONDING	SAND	IMPROBABLE-THIN LAYER
SANITARY LANDFILL (TRENCH)	SEVERE-DEPTH TO ROCK, SEEPAGE, PONDING	GRAVEL	IMPROBABLE-TOO SANDY
SANITARY LANDFILL (AREA)	SEVERE-DEPTH TO ROCK, SEEPAGE, PONDING	TOPSOIL	POOR-TOO SANDY, WEINESS
DAILY COVER FOR LANDFILL	POOR-AREA RECLAIM, SEEPAGE, TOO SANDY	WATER MANAGEMENT (A)	
		POND RESERVOIR	SEVERE-SEEPAGE
		AREA	

BUILDING SITE DEVELOPMENT (A)		AREA	
SHALLOW EXCAVATIONS	SEVERE-DEPTH TO ROCK, CUTBANKS CAVE, PONDING	EMBANKMENTS DIKES AND LEVEES	SEVERE-SEEPAGE, PIPING, PONDING
DWELLINGS WITHOUT BASEMENTS	SEVERE-PONDING	EXCAVATED PONDS AQUIFER FED	SEVERE-DEPTH TO ROCK, CUTBANKS CAVE
DWELLINGS WITH BASEMENTS	SEVERE-PONDING	DRAINAGE	PONDING, DEPTH TO ROCK
SMALL COMMERCIAL BUILDINGS	SEVERE-PONDING	IRRIGATION	PONDING, DROUGHTY, FAST INTAKE
LOCAL ROADS AND STREETS	SEVERE-PONDING	TERRACES AND DIVERSIONS	DEPTH TO ROCK, PONDING, TOO SANDY
LAWS, LANDSCAPING AND GOLF FAIRWAYS	SEVERE-PONDING, DROUGHTY	GRASSSED WATERWAYS	WEINESS, DROUGHTY, DEPTH TO ROCK

REGIONAL INTERPRETATIONS	

## RECREATIONAL DEVELOPMENT (A)

CAMP AREAS	SEVERE-PONDING, TOO SANDY	PLAYGROUNDS	SEVERE-TOO SANDY, PONDING
PICNIC AREAS	SEVERE-PONDING, TOO SANDY	PATHS AND TRAILS	SEVERE-PONDING, TOO SANDY

## CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE (HIGH LEVEL MANAGEMENT)

CLASS- DETERMINING PHASE	CAPA- BILITY	ORANGES (BOXES)	GRAPEFRUIT (BOXES)	POTATOES (TONS)	CABBAGE (CRATES)	BAHIA GRASS (AUM)	GRASS- CLOVER (AUM)		
		INIRK	INIRK	INIRK	INIRK	INIRK	INIRK	INIRK	INIRK
ALL	4W	300	400	12	220	7.5	12.0		

## WOODLAND SUITABILITY (B)

CLASS- DETERMINING PHASE	TORD	MANAGEMENT PROBLEMS					POTENTIAL PRODUCTIVITY				TREES TO PLANT	
		SYM	EROS N	EQUIP.	SEEDL.	WINDTH	PLANT	COMMON TREES		SITE	PROD	
		HAZARD	HAZARD	LIMIT	MORT Y	HAZARD	COMPET			INDX	CLAS	
								NONE				

## WINDBREAKS

CLASS-DETERMINING PHASE	SPECIES	INT	SPECIES	INT	SPECIES	INT	SPECIES	INT
	NONE							

## WILDLIFE HABITAT SUITABILITY (C)

CLASS- DETERMINING PHASE	POTENTIAL FOR HABITAT ELEMENTS						POTENTIAL AS HABITAT FOR:					
	GRAIN & SEED	GRASS & LEGUME	WILD HERB.	HARDWD TREES	CONIFER PLANTS	SHRUBS	WETLAND PLANTS	SHALLOW WATER	OPENED WILDLF	WOODED WILDLF	WETLAND WILDLF	MANGELD WILDLF
ALL	V. POOR	POOR	POOR	POOR	POOR	-	GOOD	GOOD	POOR	POOR	GOOD	-

## POTENTIAL NATIVE PLANT COMMUNITY (MANGELAND OR FOREST UNDERSTORY VEGETATION) (D)

COMMON PLANT NAME	PLANT SYMBOL (NLSFN)	PERCENTAGE COMPOSITION (DRY WEIGHT) BY CLASS DETERMINING PHASE					
		ALL					
WACHSITILE PINELAND THREEAWN ST.-JOHNSWORT BALDCTPRESS	MYCE ABST5 BTYPR TAD12						

POTENTIAL PRODUCTION (LBS./AC. DRY WT):  
FAVORABLE YEARS  
NORMAL YEARS  
UNFAVORABLE YEARS

## FOOTNOTES

- A RATINGS BASED ON NSH, PART II, SECTION 403.  
B BASED ON SOIL SURVEY INTERPRETATIONS FOR WOODLAND PROGRESS REPORT W-16, JAN. 1970  
C WILDLIFE RATINGS BASED ON SOILS MEMORANDUM-74, JAN. 1972  
D PERCENTAGE COMPOSITION AND POTENTIAL PRODUCTION DATA NOT AVAILABLE.

92-84157: 195  
3-EV, MGH, 10-B6

REPORT SER:

[illegible]

	SEVERE-WETNESS, DEPTH TO ROCK	RECREATIONAL DEVELOPMENT	SEVERE-WETNESS, DEPTH TO ROCK
CAMP AREAS		PLAYGROUNDS	
PICNIC AREAS		PATHS AND TRAILS	

[illegible][illegible][illegible]

CLASS- DETERMINING PHASE	POTENTIAL FOR HABITAT ELEMENTS								POTENTIAL AS HABITAT FOR:							
	GRAIN	GRASS	WILD HERB	THARD	CONIFER	SHRUBS	WETLAND	SHALLOW	OPENLD	WOODDL	WETLAND	RANGELD				
SEED	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
PLANT	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
FRUIT	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
LEAF	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
ROOT	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
STEM	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
BARK	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
WOOD	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
LEAF	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
FRUIT	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
SEED	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
PLANT	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
FRUIT	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
LEAF	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
ROOT	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
STEM	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
BARK	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				
WOOD	POOR	FAIR	FAIR	POOR	POOR	-	FAIR	GOOD	POOR	POOR	FAIR	POOR				

[illegible]

4 ESTIMATED SOIL PROPERTIES BASED ON TEST DATA FROM 1 PEDON SAMPLED HENDRY COUNTY FLORIDA.  
3 RATINGS BASED ON NSH PART 603, JULY 1983.  
2 RATINGS BASED ON NEM.

# NRCS Accessibility Statement

---

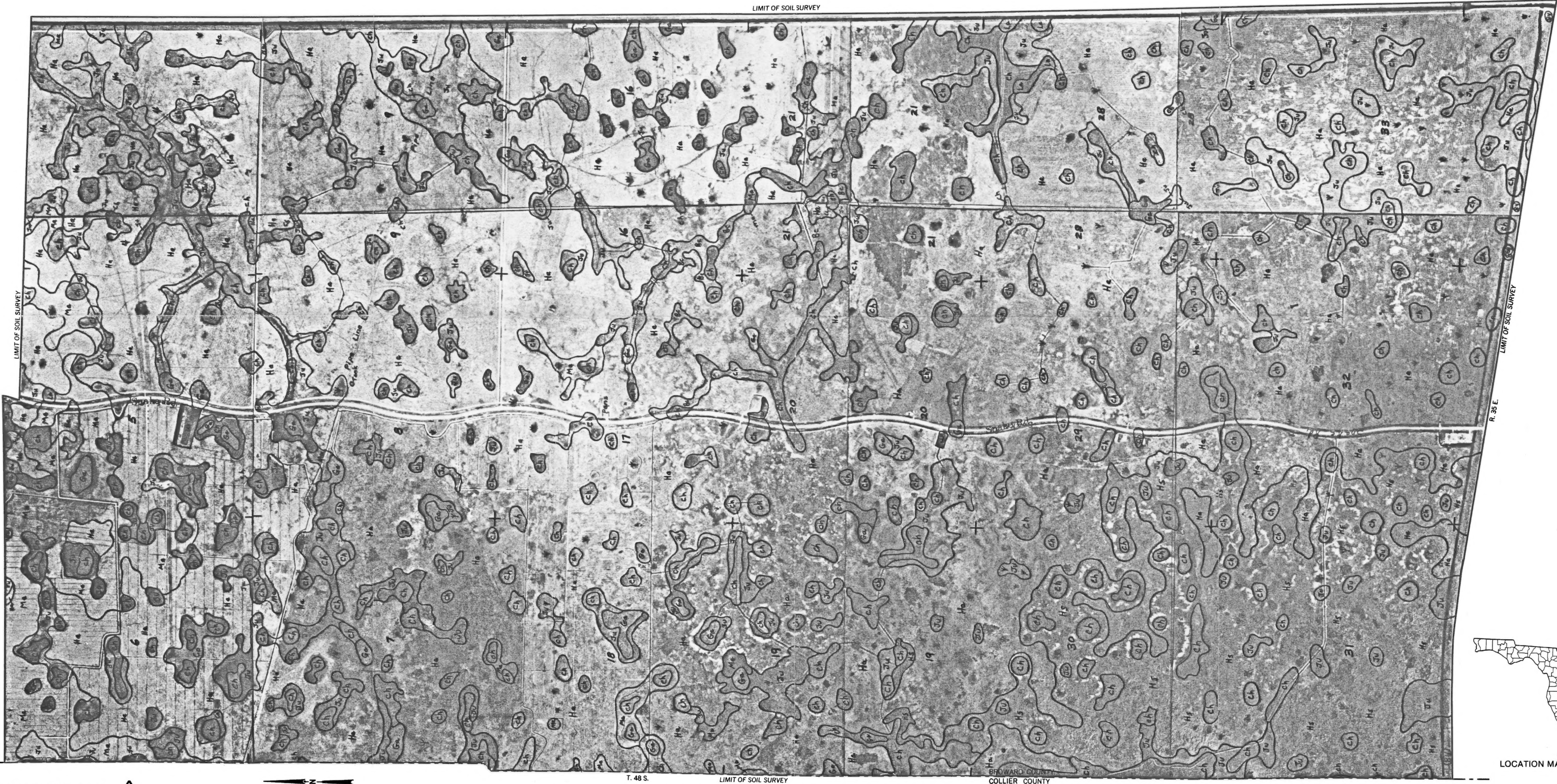
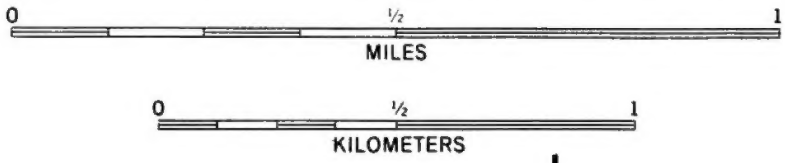
This document is not accessible by screen-reader software. The Natural Resources Conservation Service (NRCS) is committed to making its information accessible to all of its customers and employees. If you are experiencing accessibility issues and need assistance, please contact our Helpdesk by phone at 1-800-457-3642 or by e-mail at [ServiceDesk-FTC@ftc.usda.gov](mailto:ServiceDesk-FTC@ftc.usda.gov). For assistance with publications that include maps, graphs, or similar forms of information, you may also wish to contact our State or local office. You can locate the correct office and phone number at <http://offices.sc.egov.usda.gov/locator/app>.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotope, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.



- LEGEND
- Bc Boca fine sand
  - Ch Chobee muck, limestone substratum, depressional
  - Co Copeland mucky fine sand, depressional
  - Ga Gator muck, limestone substratum, depressional
  - Ha Hallandale fine sand
  - Hs Hallandale fine sand, slough
  - Ju Jupiter fine sand
  - La Lauderhill muck
  - Ma Margate fine sand

SOIL SURVEY MAP  
OF THE  
MICCOSUKEE INDIAN ALLIGATOR ALLEY RESERVATION  
BROWARD COUNTY, FLORIDA







LEGEND

- Ch Chobee muck, limestone substratum, depressional
- Co Copeland mucky fine sand, depressional
- Ga Gator muck, limestone substratum, depressional
- Ha Hallandale fine sand
- Hs Hallandale fine sand, slough
- Ju Jupiter fine sand
- Oc Ochopee loamy fine sand